

Appendix B

Meteorological Data

This section contains meteorological data derived from various regulatory and non-regulatory sites. The data provides a comparative analysis of winds speed, wind direction, wind gusts and concentration data. Please note that meteorological instruments measure at different heights, and at different time intervals. By taking, the actual time of measurement and assuring that all data represented is in Pacific Standard Time (PST) there is uniformity of the data. In addition, not all stations measure at the exact same time, i.e. measurements at 053 and 056 therefore, comparisons are measurements within a 60-minute period. While there may be some overlapping and slight differences the comparative analysis provides the reader with a better understanding of the regional effect of the Exceptional Event.

FIGURE B-1
METEOROLOGICAL SITES WITHIN IMPERIAL, SAN DIEGO, RIVERSIDE, AND YUMA COUNTIES

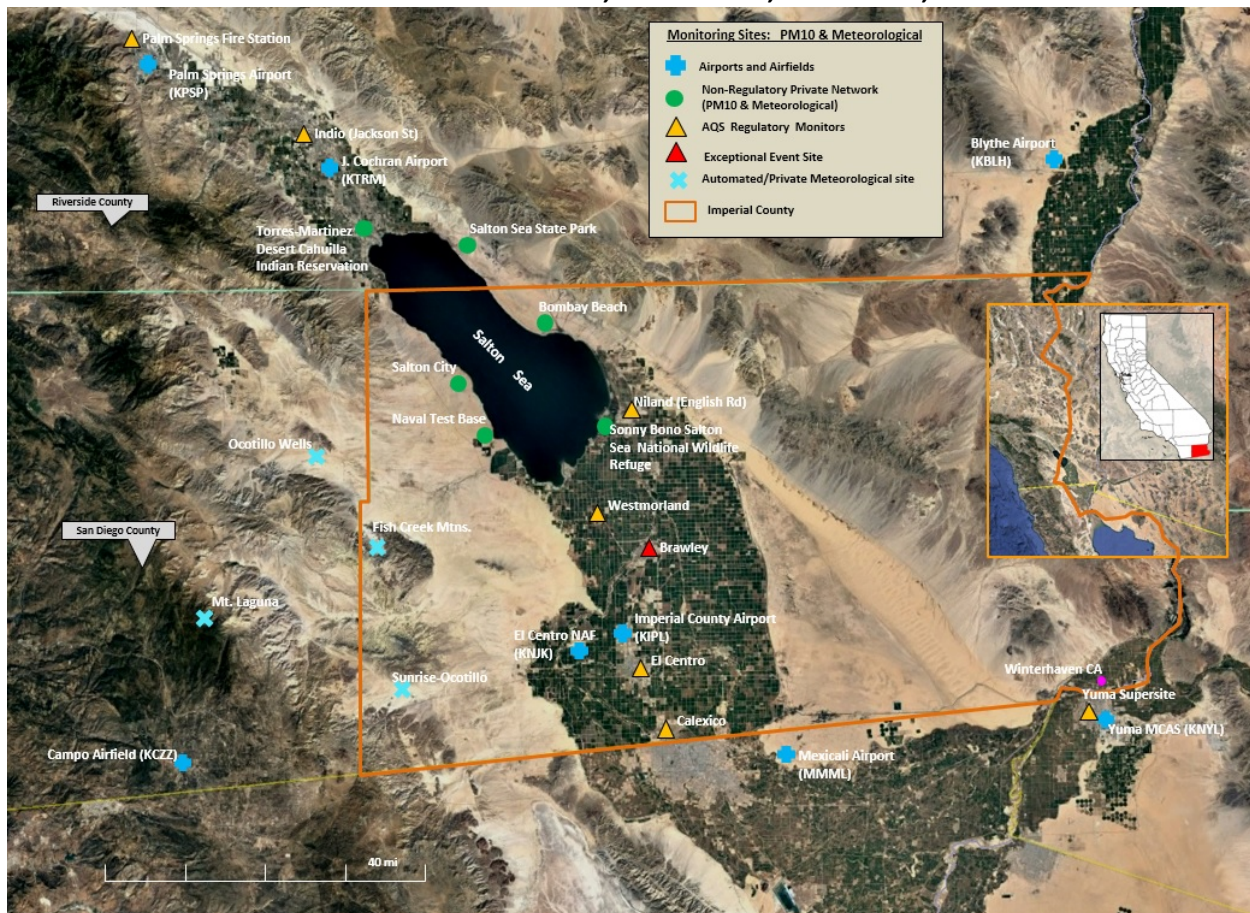
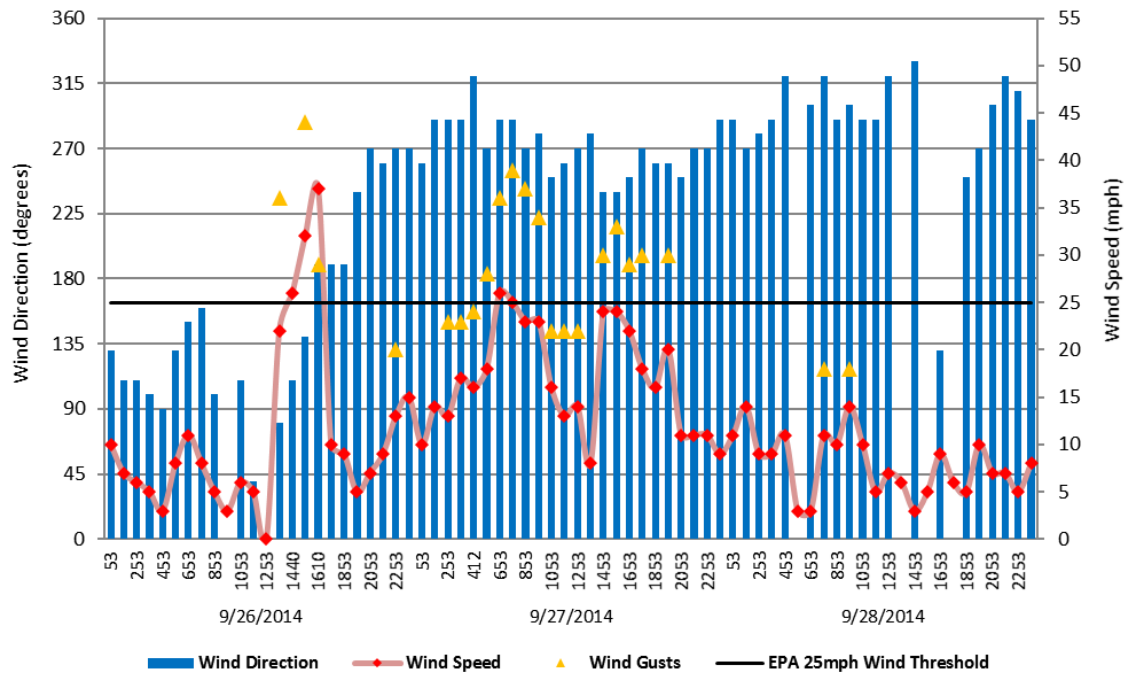


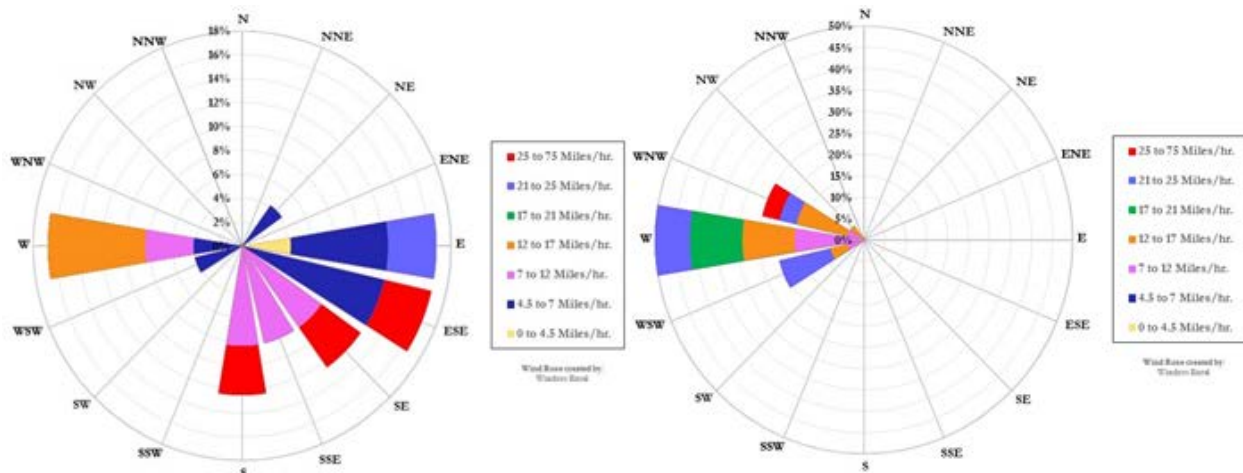
Fig B-1: Depicts the meteorological and air quality monitoring stations referenced in this document. Base map from Google Earth

**IMPERIAL COUNTY SITES
FIGURES B-2 THROUGH B-11**

**FIGURE B-2
IMPERIAL COUNTY AIRPORT (KIPL)
WIND SPEED, GUSTS AND DIRECTION**

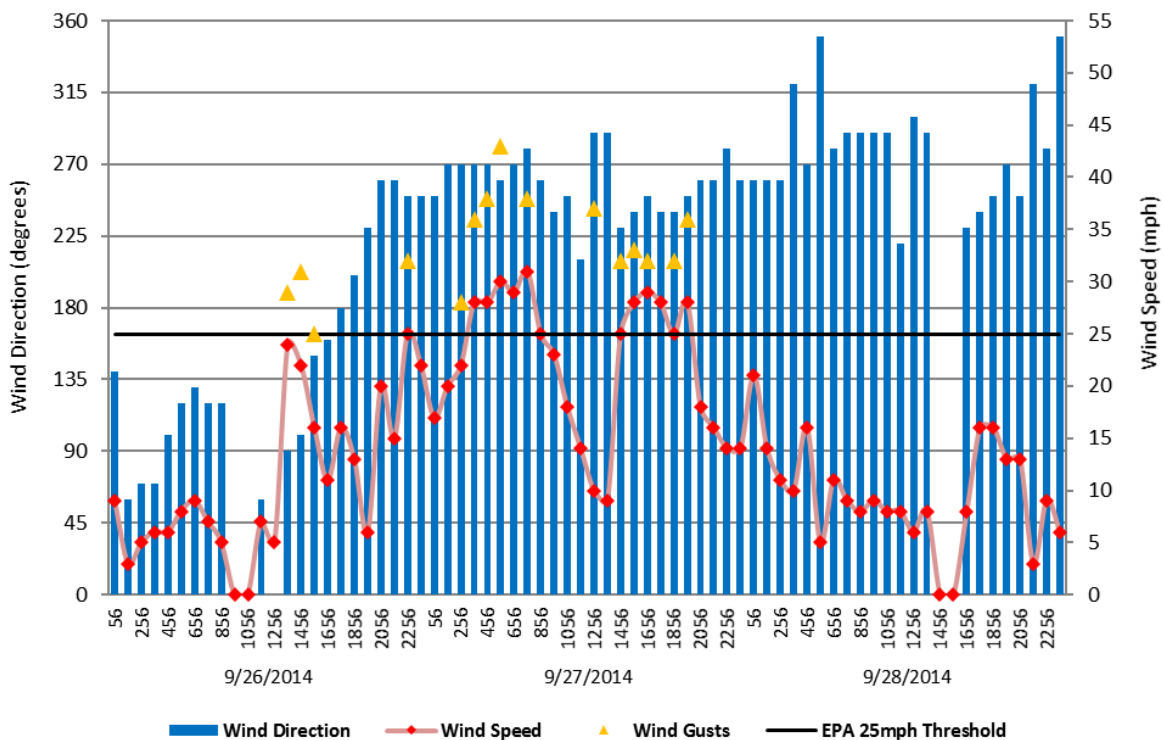


**FIGURES B-3
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014**

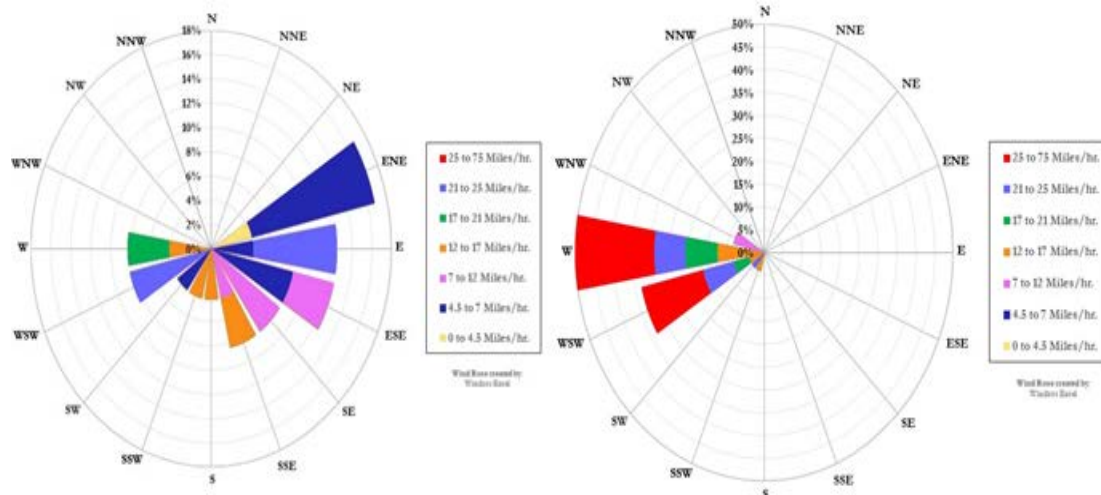


Figs B-2 and B-3: Imperial Airport meteorological data for September 26, 2014 through September 28, 2014, illustrates the different wind direction September 26, 2014 to September 27, 2014. Wind data from the NCEI's QCLCD system

FIGURE B-4
EL CENTRO NAF (KNJK)
WIND SPEED, GUSTS AND DIRECTION

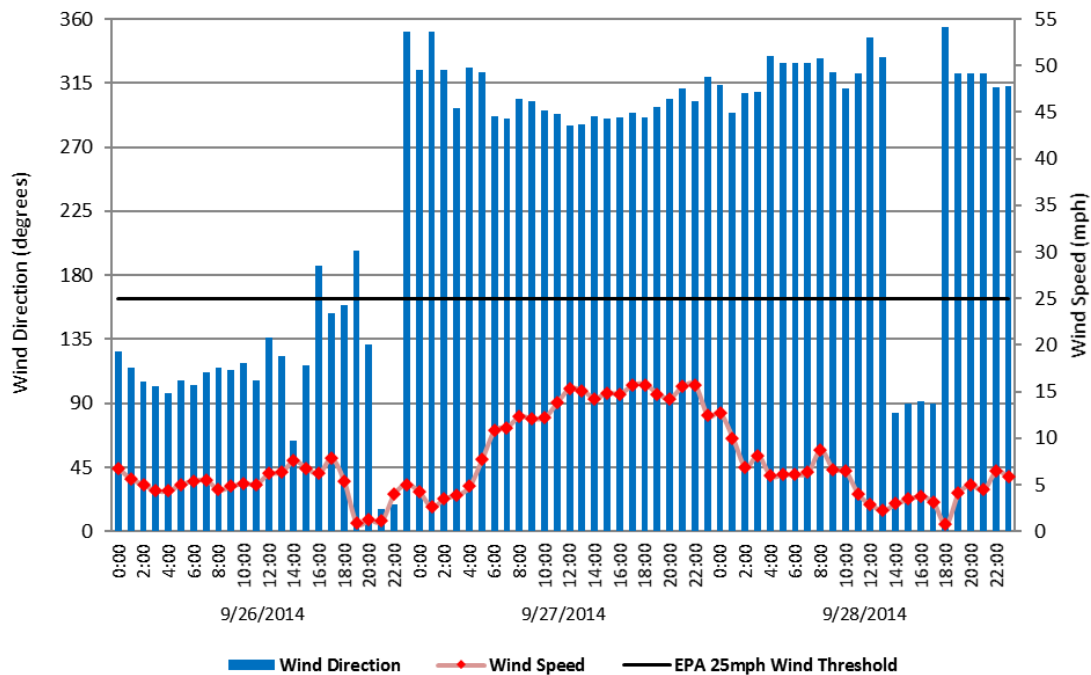


FIGURES B-5
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

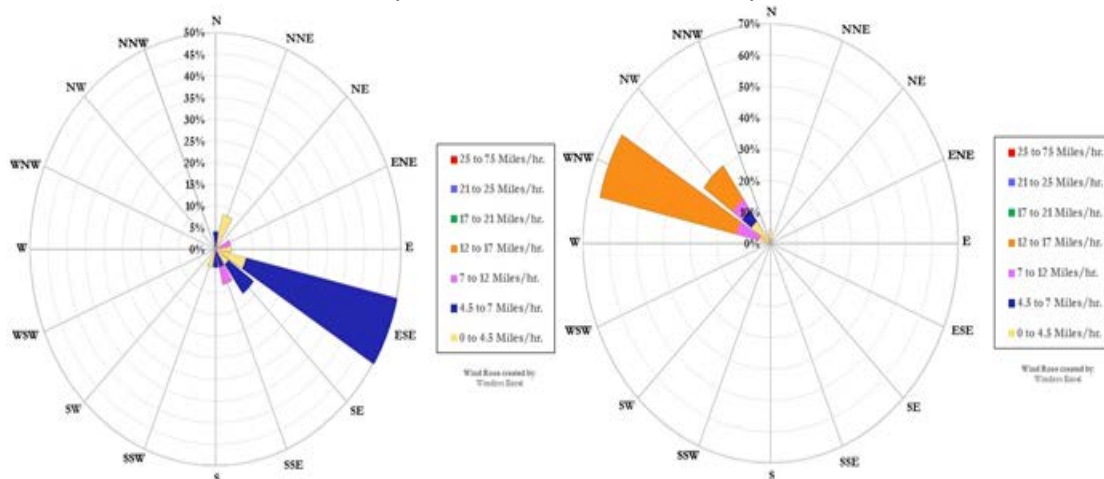


Figs B-4 and B-5: El Centro NAF meteorological data for September 26, 2014 through September 28, 2014, illustrates the different wind direction September 26, 2014 to September 27, 2014. Wind data from the NCEI's QCLCD system

FIGURE B-6
CALEXICO WIND SPEED AND DIRECTION

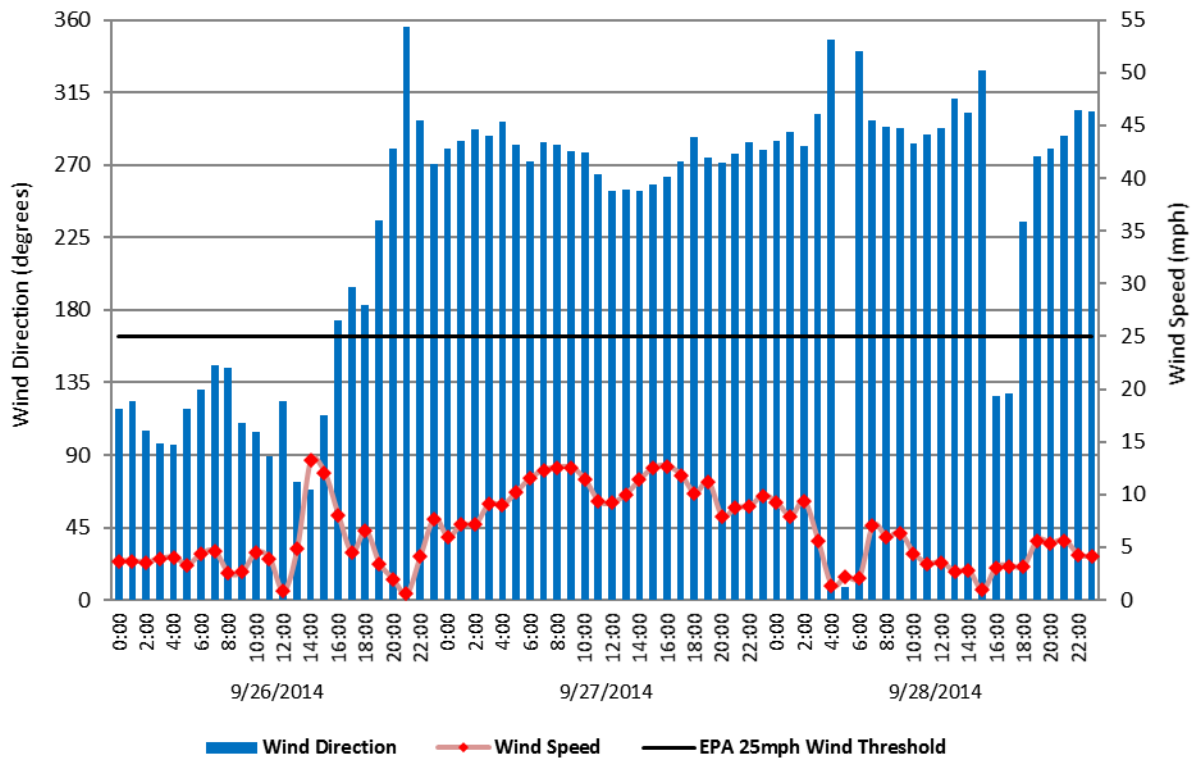


FIGURES B-7
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

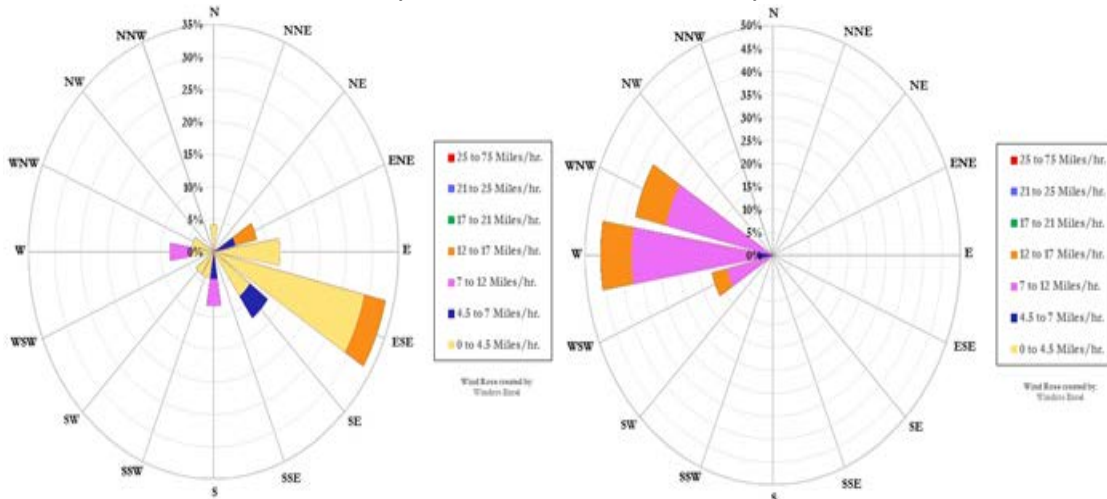


Figs B-6 and B-7: Calexico meteorological data for September 26, 2014 through September 28, 2014, illustrates the different wind direction September 26, 2014 to September 27, 2014. Wind data from the NCEI's QCLCD system

FIGURE B-8
EL CENTRO WIND SPEED AND DIRECTION

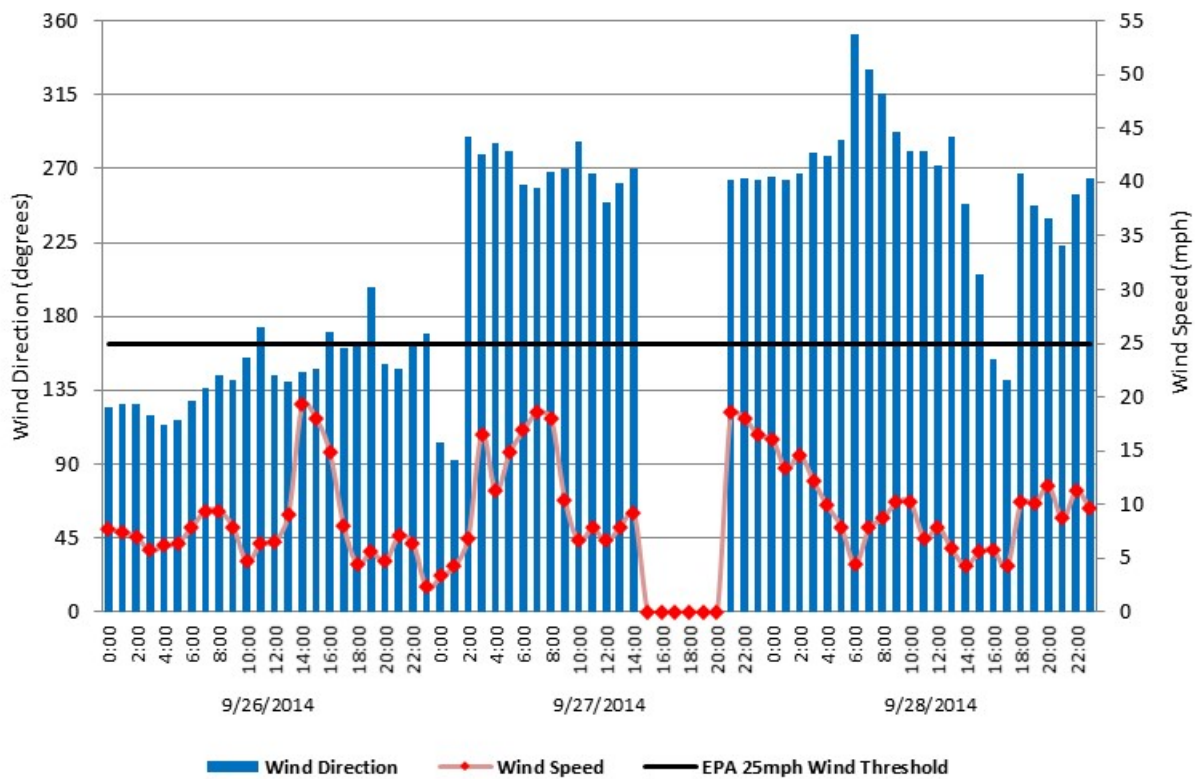


FIGURES B-9
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

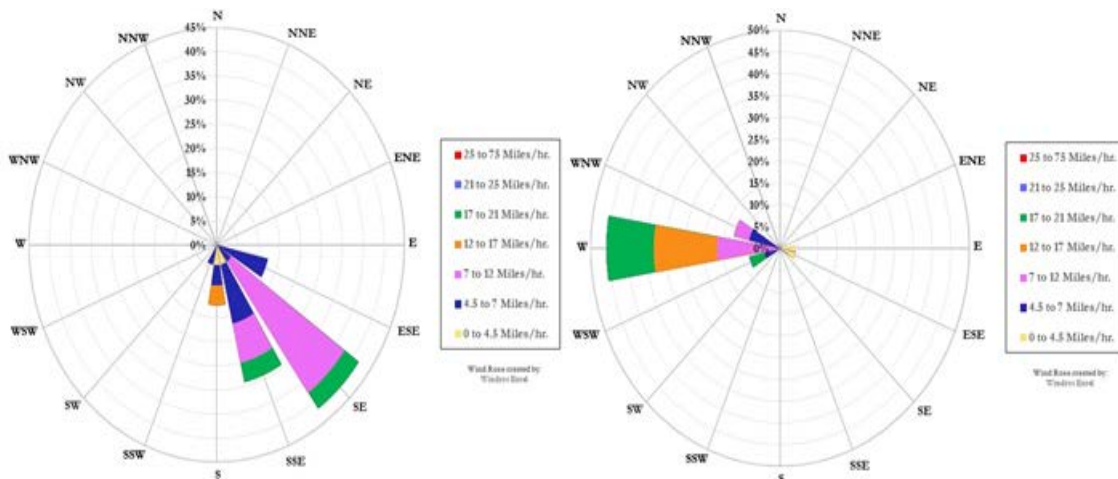


Figs B-8 and B-9: El Centro meteorological data for September 26, 2014 through September 28, 2014, illustrates the different wind direction September 26, 2014 to September 27, 2014. Wind data from the NCEI's QCLCD system.

FIGURE B-10
NILAND WIND SPEED AND DIRECTION



FIGURES B-11
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014



Figs B-10 and B-11: The Niland meteorological data, north of Brawley, measured increasing elevated wind speeds for several hours on September 26, 2014 and September 27, 2014. The data gap represent the length of time during the power outage. Wind data from the EPA's AQS system

**RIVERSIDE COUNTY SITES
FIGURES B-12 THROUGH B-14**

**FIGURE B-12
PALM SPRINGS AIRPORT (KPSP)
WIND SPEED, GUSTS AND DIRECTION**

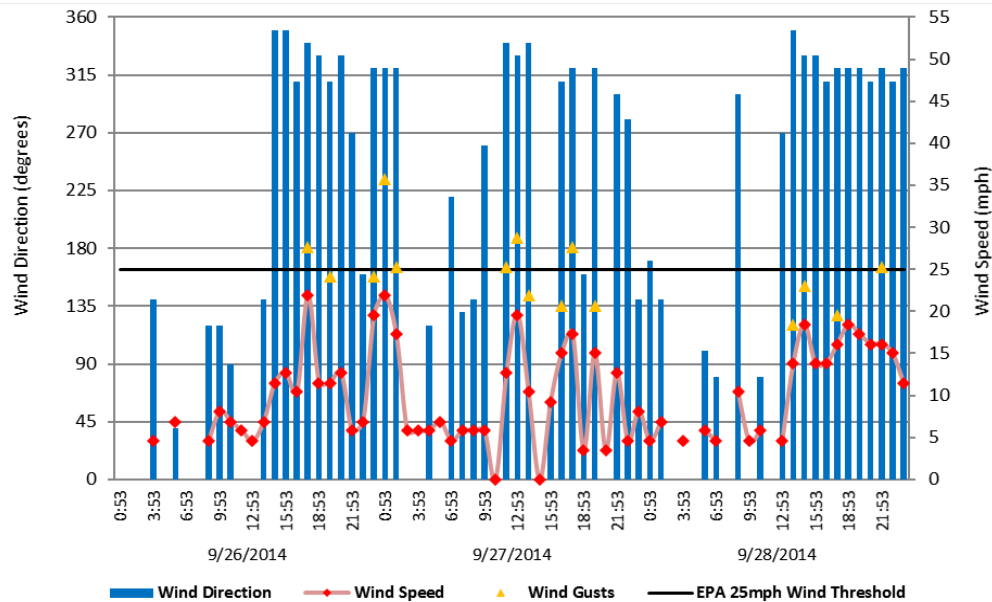


Fig B-12: Palm Springs Airport wind data from the University of Utah's MesoWest

**FIGURE B-13
JACQUELINE COCHRAN AIRPORT (KTRM)
WIND SPEED, GUSTS AND DIRECTION**

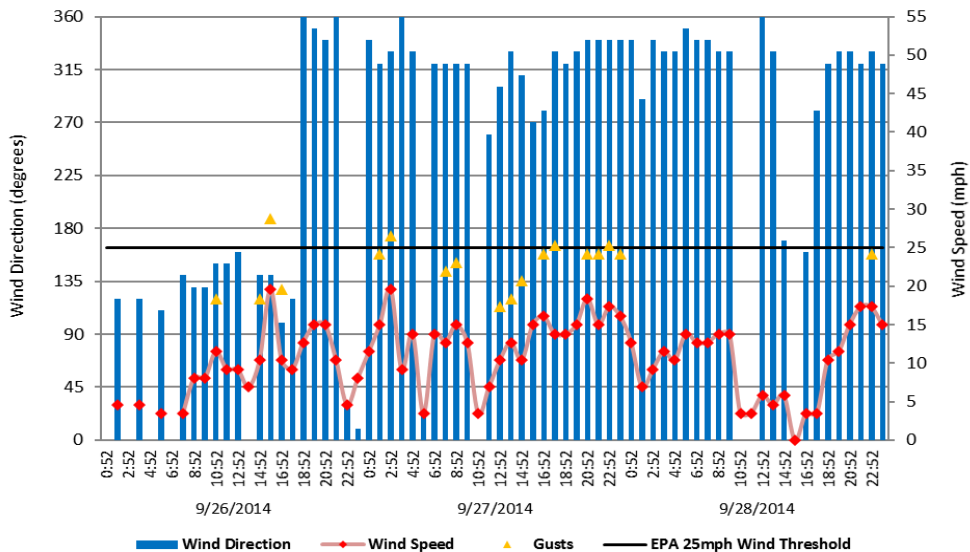


Fig B-13: Jacqueline Cochran Airport wind data from the University of Utah's MesoWest

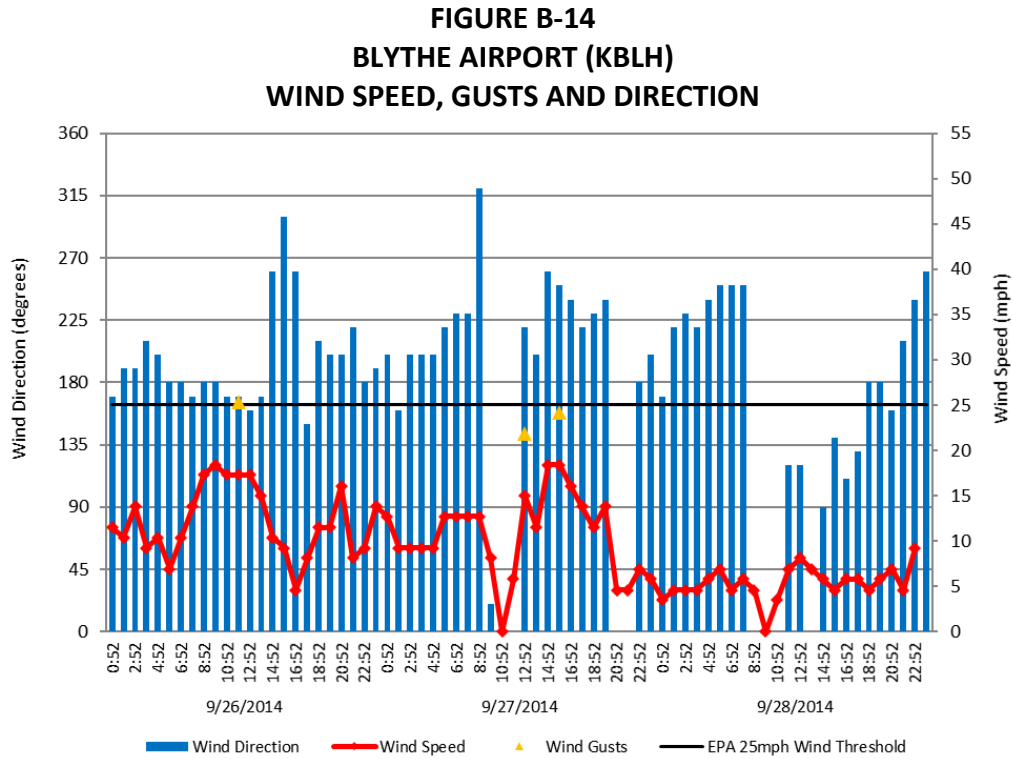


Fig B-14: Blythe Airport wind data from the University of Utah's MesoWest

**SOUTHERN SAN DIEGO COUNTY
AND UPSTREAM SITES**

**FIGURE B-15
CAMPO AIRPORT (KCZZ)
WIND SPEED, GUSTS AND DIRECTION**

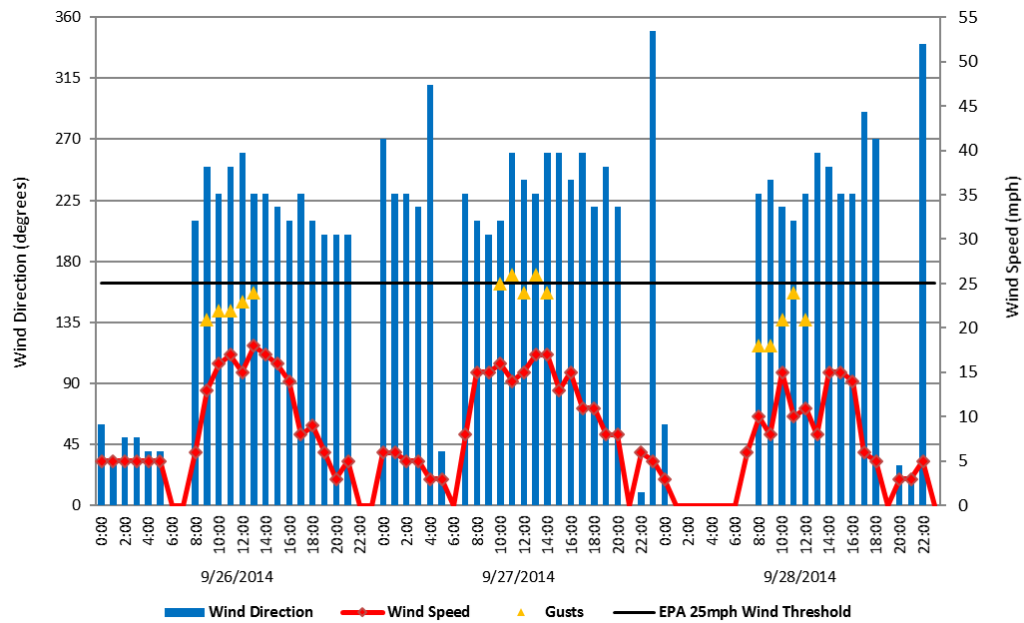
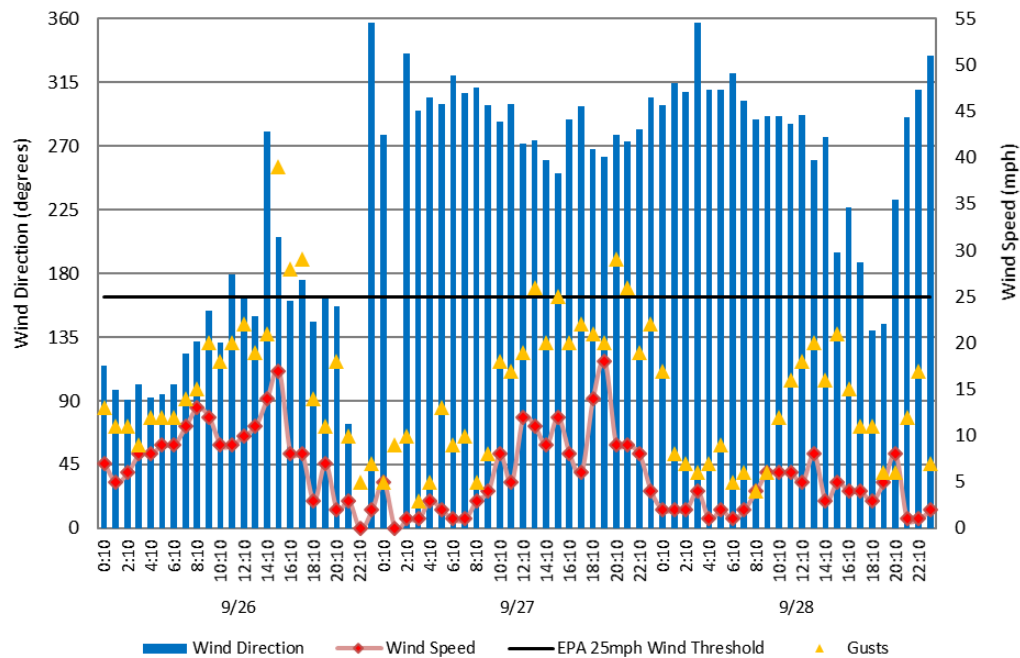
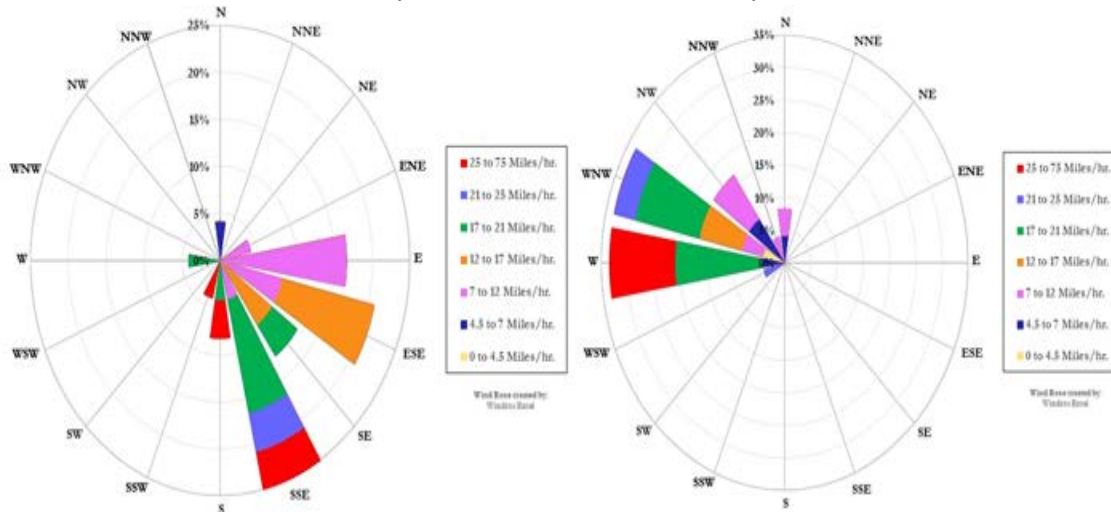


Fig B-15: Campo Airport wind data from the NCEI's QCLCD system.

FIGURE B-16
CAHUILL RANGER STATION
WIND SPEED, GUSTS AND DIRECTION

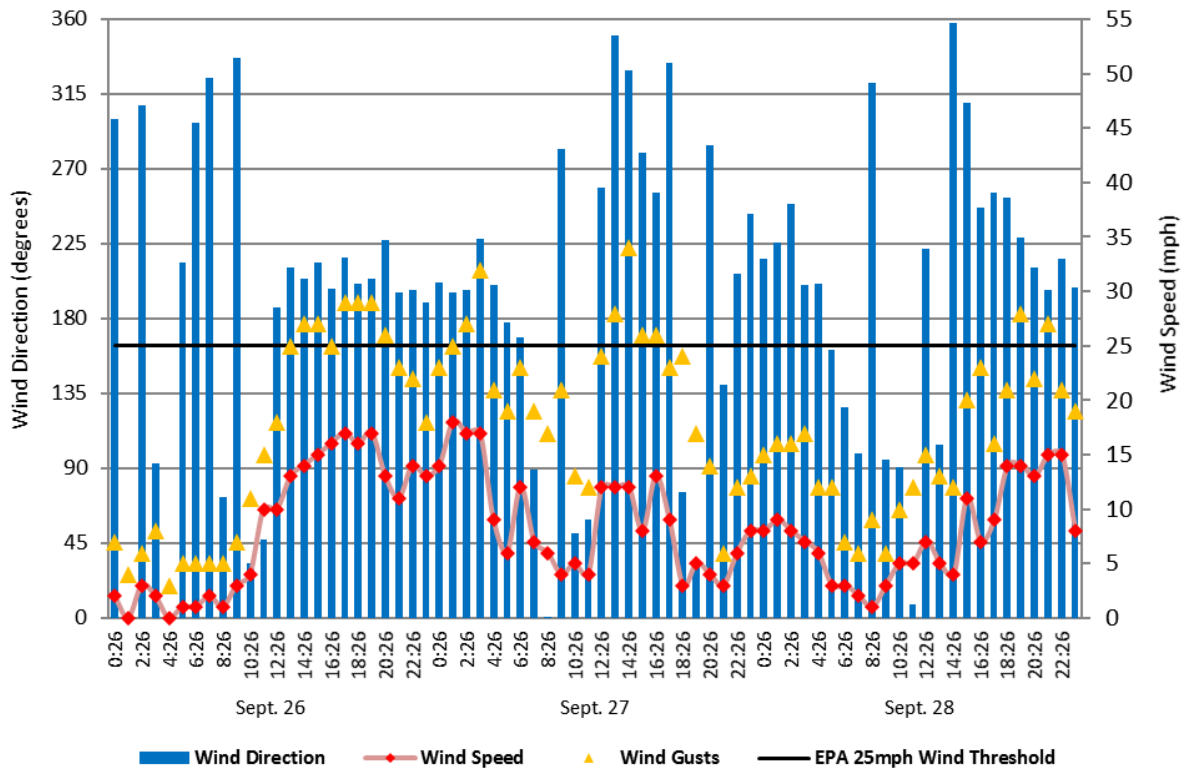


FIGURES B-17
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

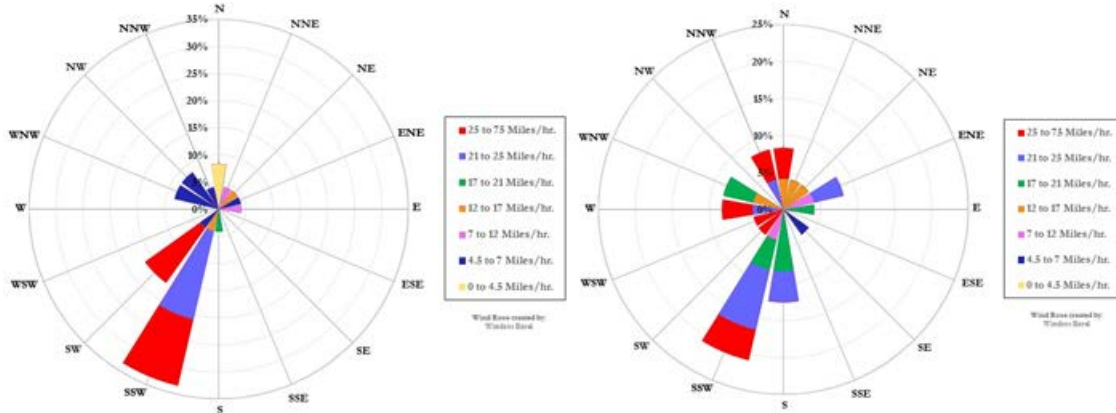


Figs B-16 and B-17: Wind roses for the Cahuilla Ranger Station depict gusts (not winds) on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID QCAC1)

FIGURE B-18
FISH CREEK MOUNTAINS
WIND SPEED, GUSTS AND DIRECTION

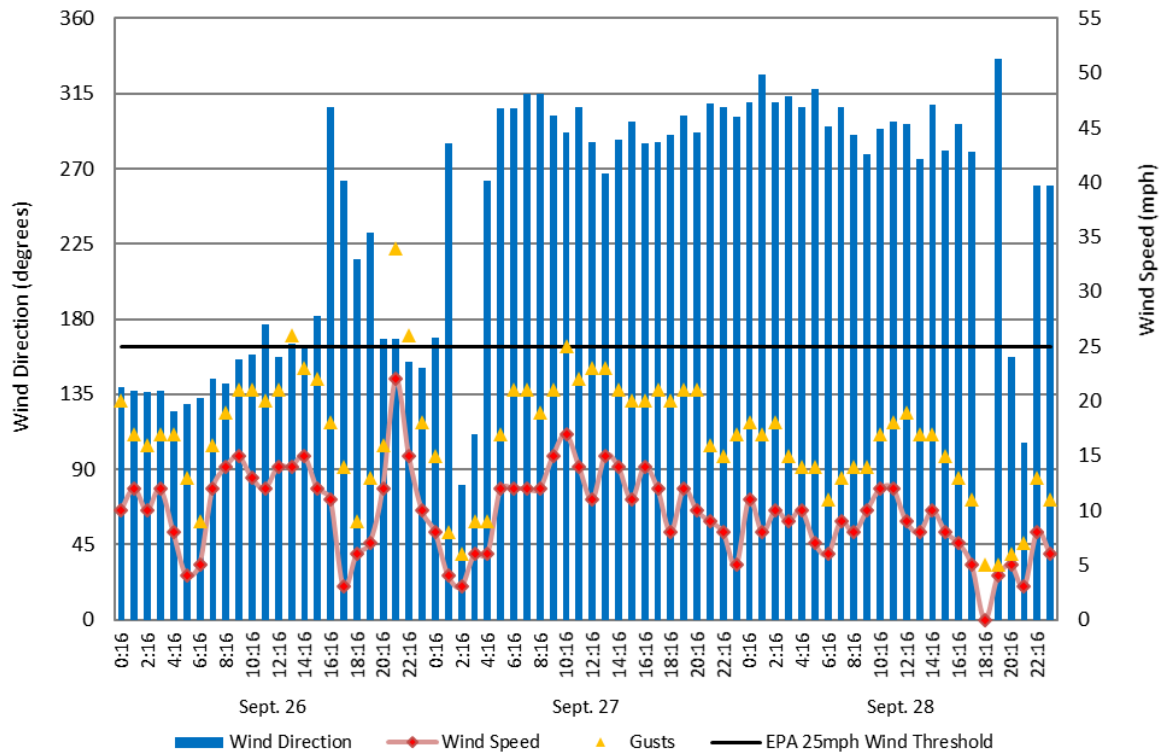


FIGURES B-19
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

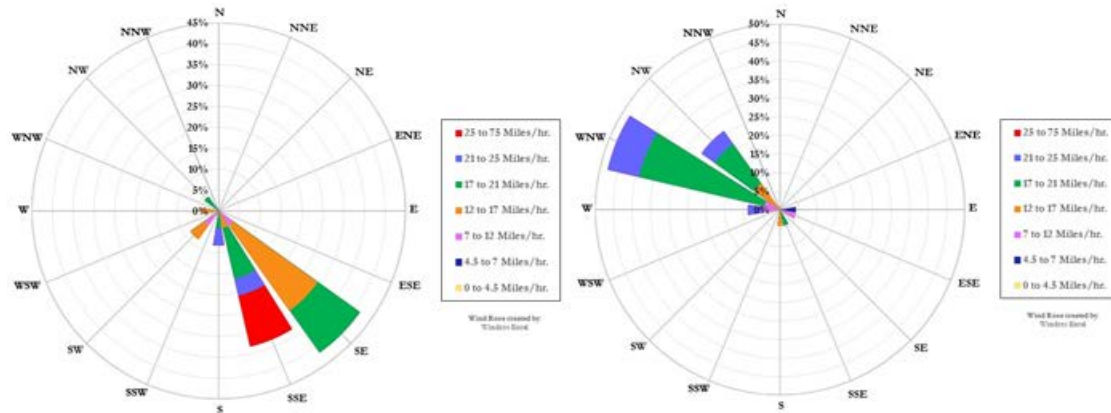


Figs B-18 and B-19: Wind roses for the Fish Creek Mountains depict gusts (not winds) on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID FHCC1)

FIGURE B-20
FORT YUMA, ARIZONA
WIND SPEED, GUSTS AND DIRECTION

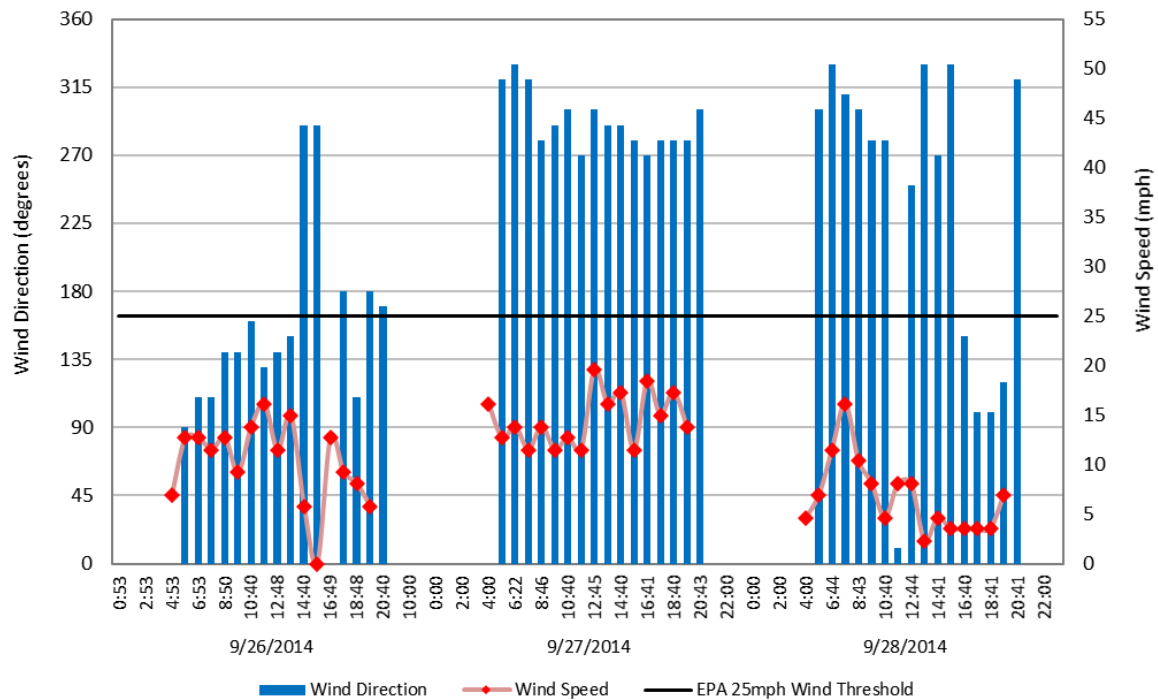


FIGURES B-21
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

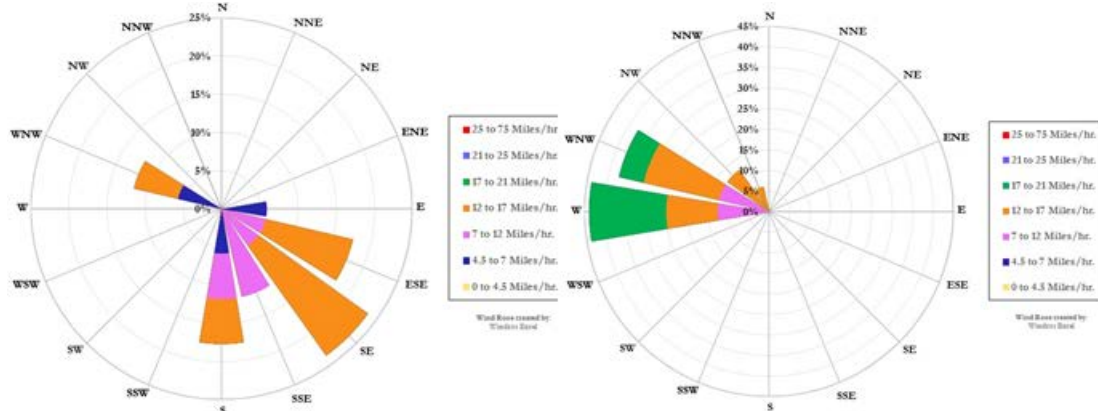


Figs B-20 and B-21: Wind roses for Fort Yuma, AZ depict gusts (not winds) on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID FTYA3)

FIGURE B-22
MEXICALI, MEXICO AIRPORT (MMML)
WIND SPEED, GUSTS AND DIRECTION

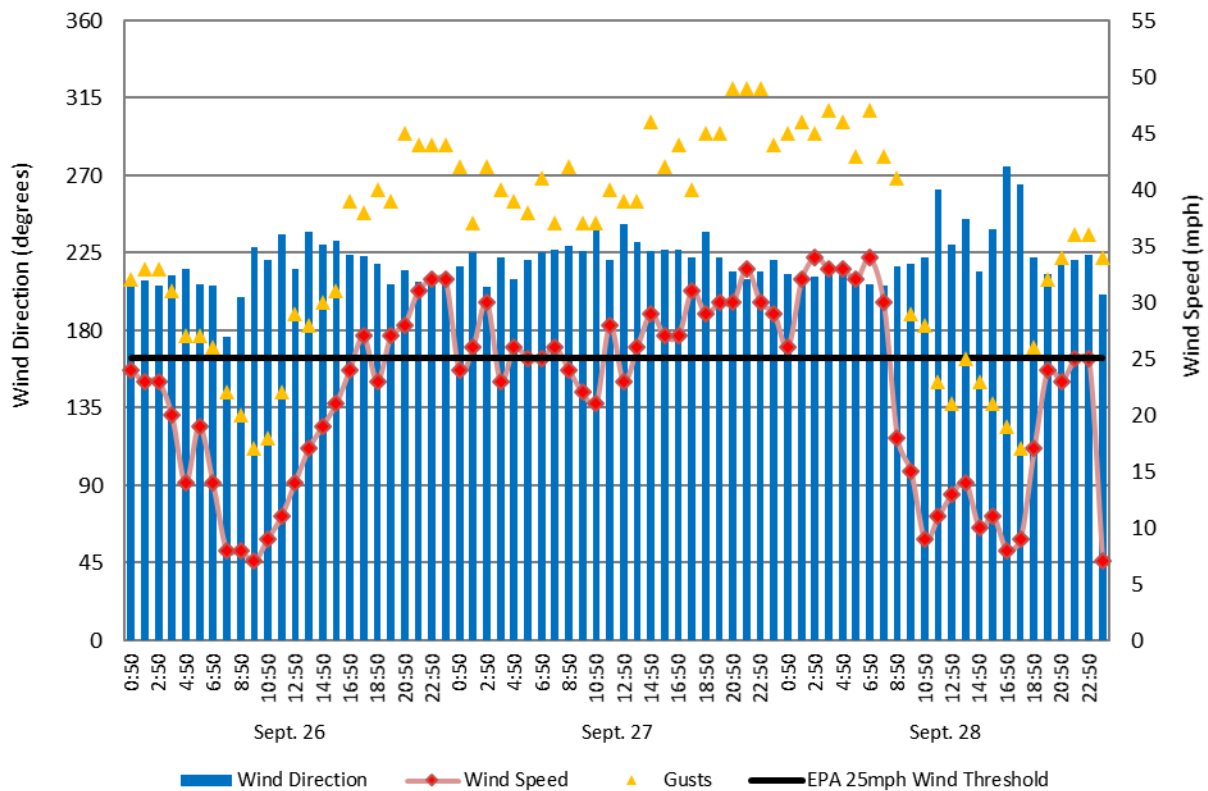


FIGURES B-23
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

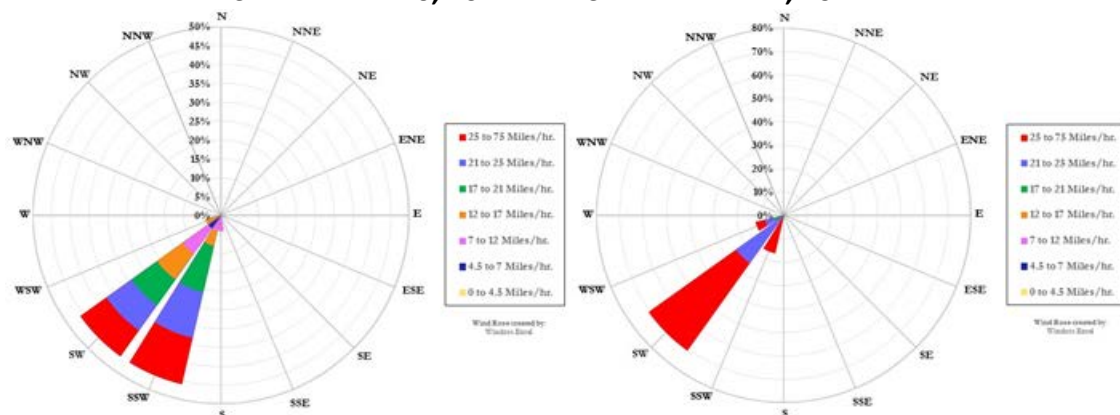


Figs B-22 and B-23: Wind roses for Mexicali, Mexico International Airport depict winds on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID MMML)

FIGURE B-24
MOUNTAIN SPRINGS GRADE
WIND SPEED, GUSTS AND DIRECTION

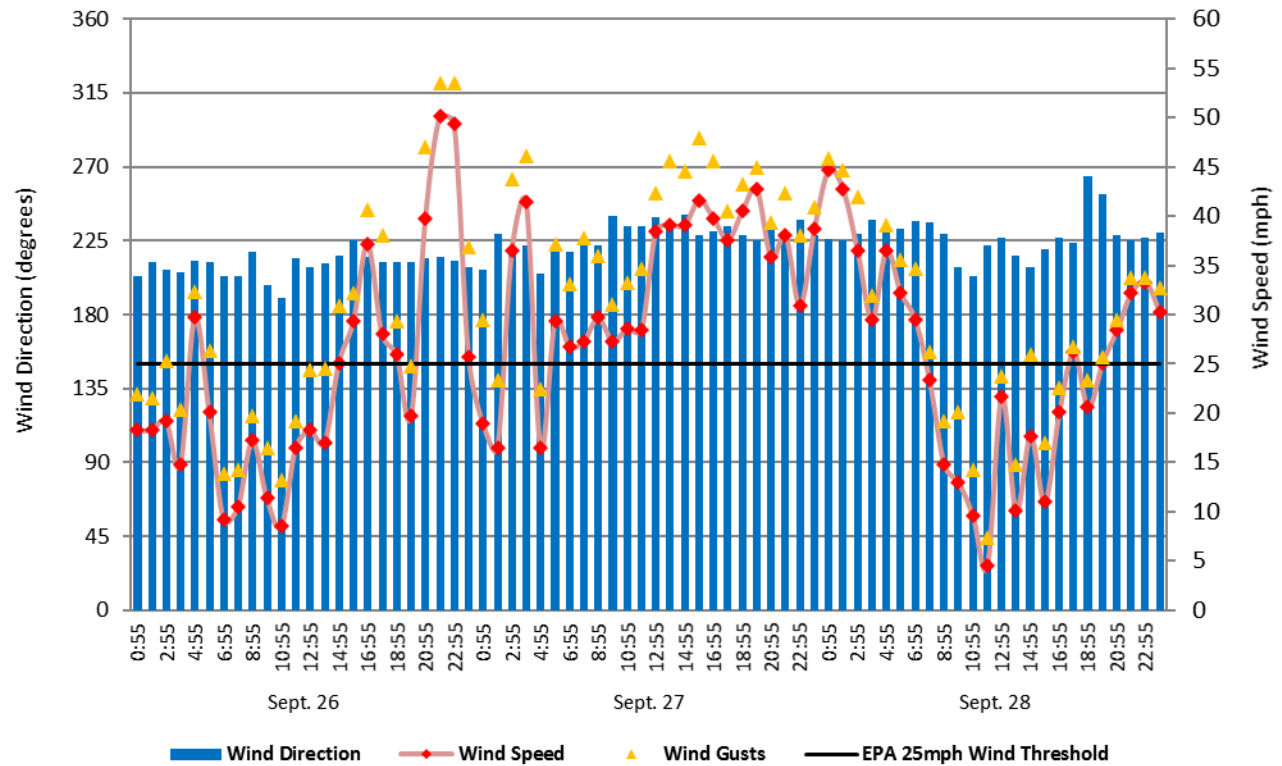


FIGURES B-25
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

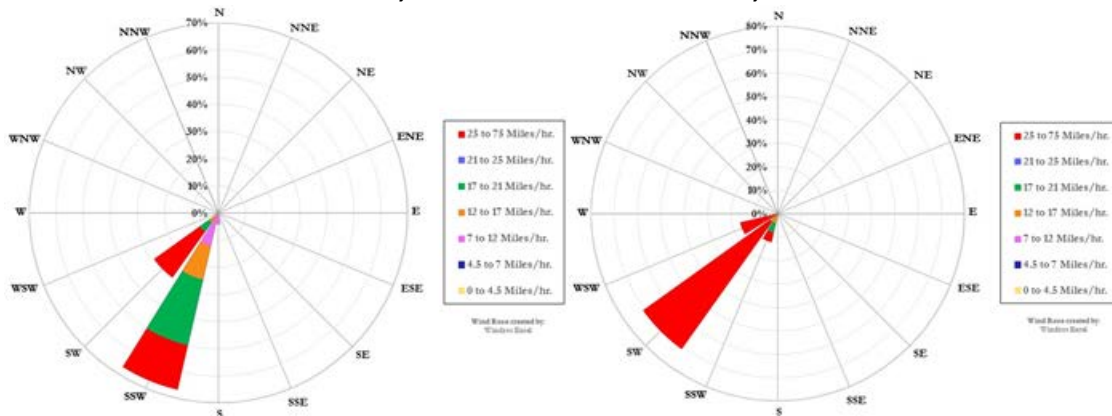


Figs B-24 and B-25: Wind roses for Mountain Springs Grade depict winds on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID TNSC1)

**FIGURE B-26
MOUNT LAGUNA
WIND SPEED, GUSTS AND DIRECTION**

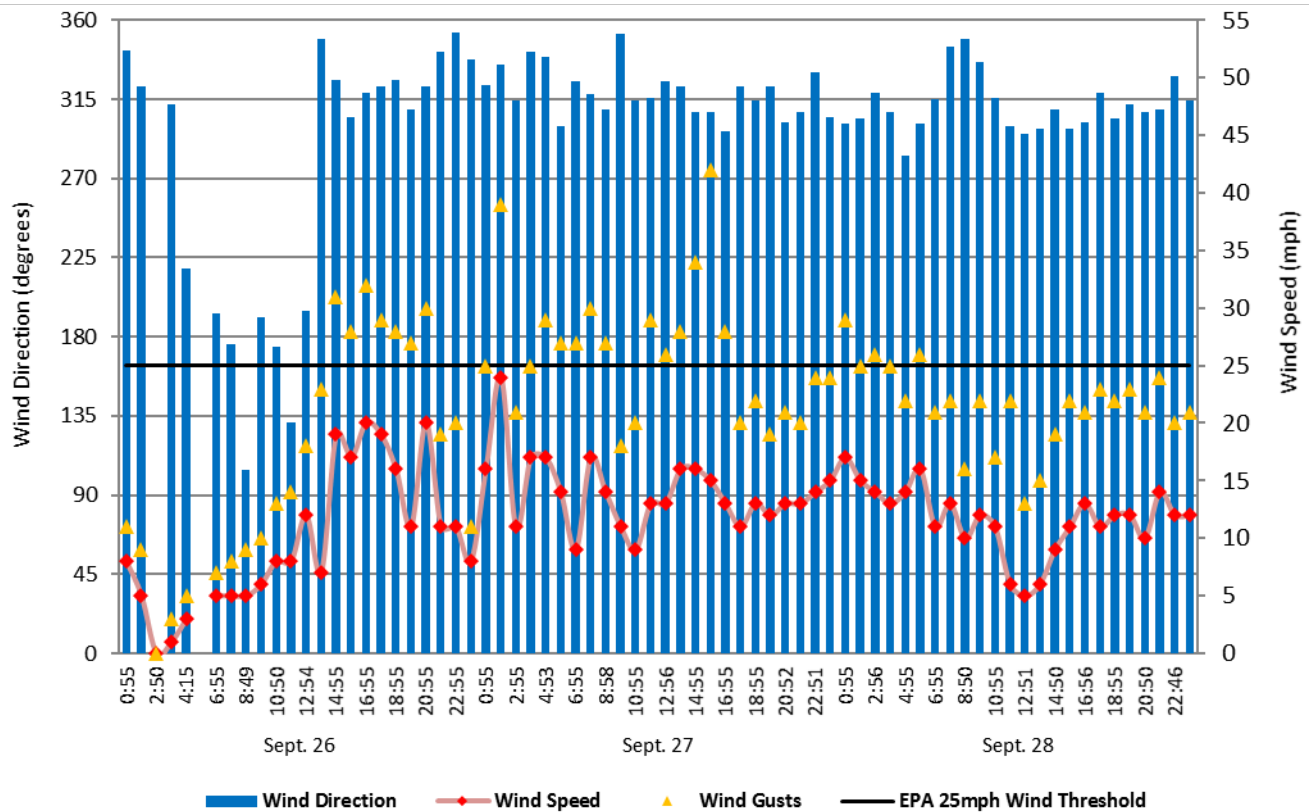


**FIGURES B-27
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014**

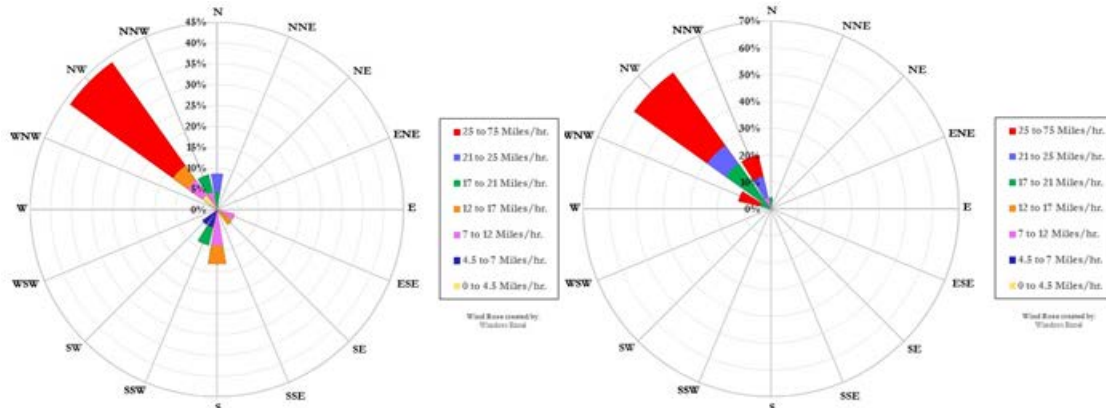


Figs B-26 through B-27: Wind roses for Mount Laguna (former USAF site) depict winds on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station ID HP001)

FIGURE B-28
OCOTILLO WELLS
WIND SPEED, GUSTS AND DIRECTION

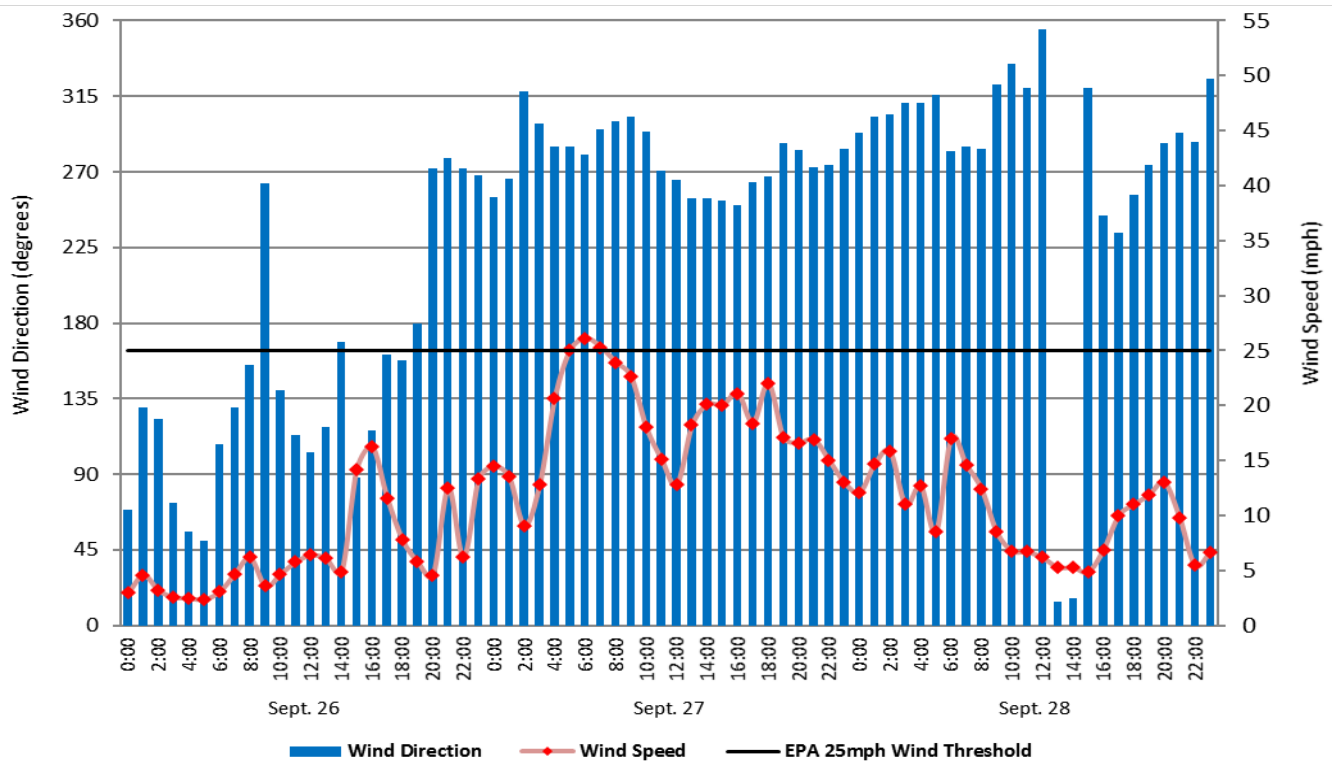


FIGURES B-29
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014

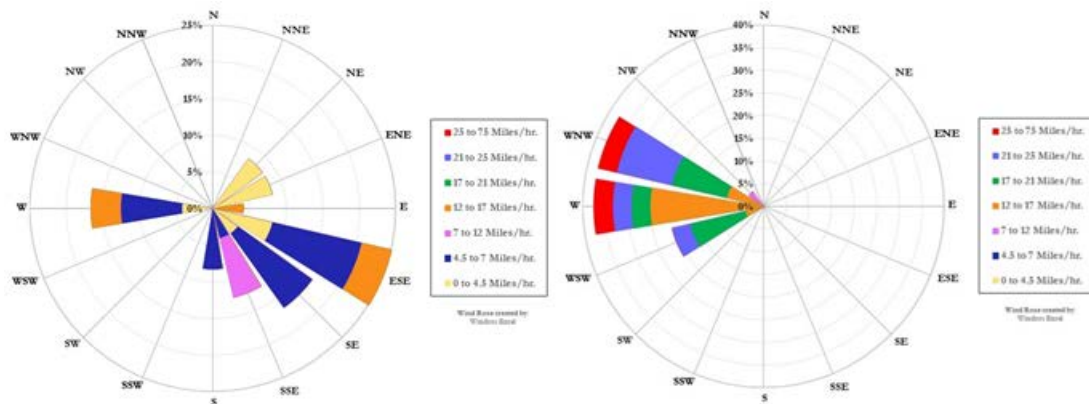


Figs B-28 and B-29: Wind roses for Ocotillo Wells depict gusts (not winds) on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station IDAS398/KD6RSQ5)

**FIGURE B-30
SEELEY WIND SPEED AND DIRECTION**

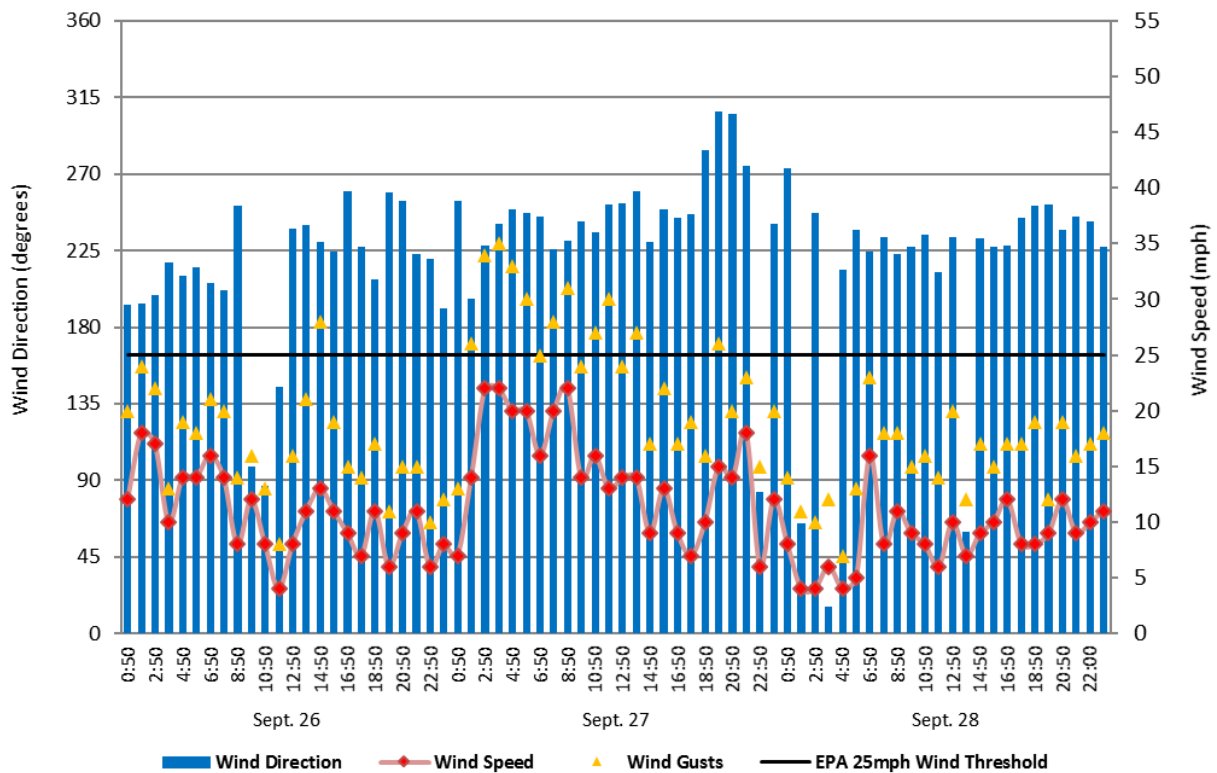


**FIGURES B-31
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014**

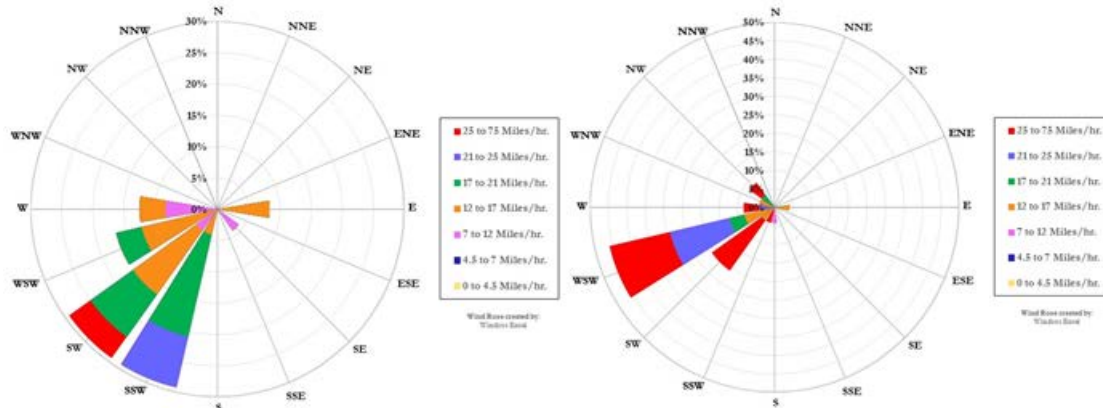


Figs B-30 and B-31: Wind roses for Seeley depict winds on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station CI068).

**FIGURE B-32
SUNRISE-OCOTILLO
WIND SPEED, GUSTS AND DIRECTION**

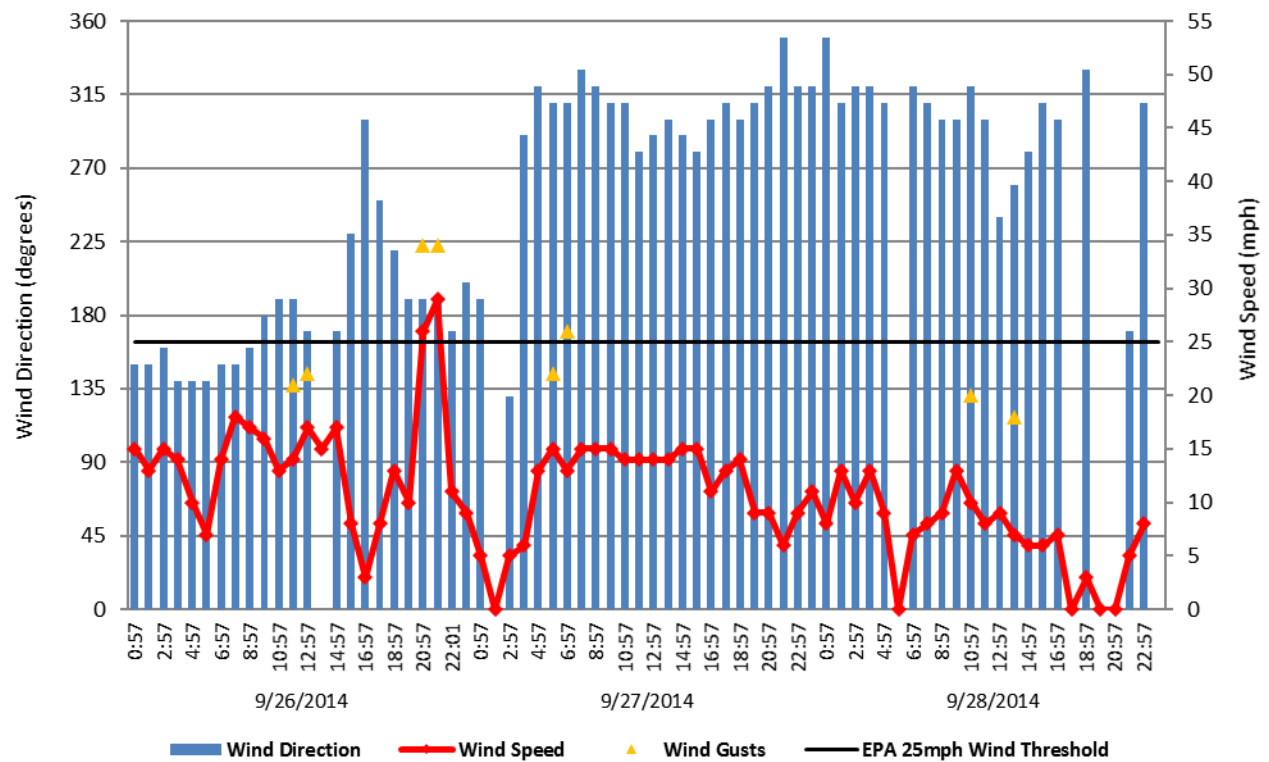


**FIGURES B-33
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014**

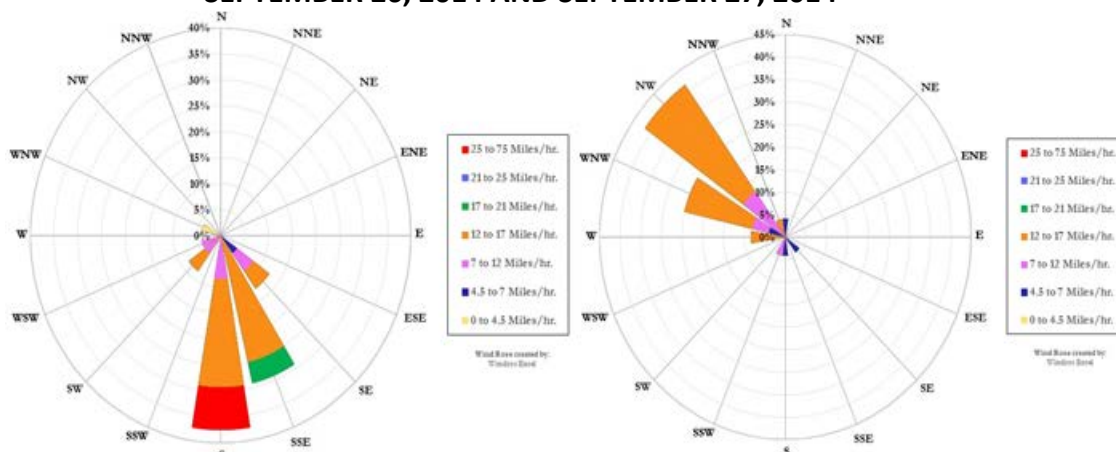


Figs B-32 and B-33: Wind roses for Sunrise-Ocotillo depict gusts (not winds) on September 26, 2014 (left), and September 27, 2014 (right). Wind data from the University of Utah's MesoWest (Station IMPSD)

FIGURE B-34
YUMA MCAS (KNYL)
WIND SPEED, GUSTS AND DIRECTION



FIGURES B-35
WIND ROSES
SEPTEMBER 26, 2014 AND SEPTEMBER 27, 2014



Figs B-34 and B-35: Yuma MCAS was upstream from Brawley on September 26, 2014 as indicated by the left wind rose. On September 27, 2014, wind direction changed, and the station was downstream (right wind rose). Wind data from the NCEI's QCLCD system

FIGURE B-36
IMPERIAL COUNTY AIRPORT (KIPL) QCLCD

QUALITY CONTROLLED Local Climatological Data: IMPERIAL COUNTY AIRPORT

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration

**QUALITY CONTROLLED LOCAL
 CLIMATOLOGICAL DATA**
(final)
HOURLY OBSERVATIONS TABLE
IMPERIAL COUNTY AIRPORT (03144)
IMPERIAL, CA
(09/2014)

National Climatic Data Center
 Federal Building
 151 Patton Avenue
 Asheville, North Carolina 28801

Elevation: -58 ft. below sea level
 Latitude: 32.834
 Longitude: -115.578
 Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Altitude (in. hg)
						(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
26	0053	12	CLR	10.00		84	28.9	80	26.4	78	25.6	82	10	130		29.81			29.75	AA		29.75
26	0153	12	CLR	10.00		83	28.3	79	26.3	78	25.6	85	7	110		29.81			29.75	AA		29.75
26	0253	12	CLR	10.00		83	28.3	79	26.3	78	25.6	85	6	110		29.81			29.75	AA		29.75
26	0353	12	CLR	10.00		82	27.8	78	25.7	77	25.0	85	5	100		29.82			29.76	AA		29.76
26	0453	12	CLR	10.00		82	27.8	78	25.4	76	24.4	82	3	090		29.83			29.77	AA		29.77
26	0553	12	CLR	10.00		82	27.8	78	25.4	76	24.4	82	8	130		29.83			29.77	AA		29.77
26	0653	12	CLR	10.00		84	28.9	79	26.1	77	25.0	80	11	150		29.84			29.78	AA		29.78
26	0753	12	CLR	10.00		87	30.6	80	26.5	77	25.0	72	8	160		29.86			29.80	AA		29.80
26	0853	12	CLR	10.00		91	32.8	78	25.6	73	22.8	56	5	100		29.86			29.80	AA		29.80
26	0953	12	CLR	10.00		93	33.9	77	24.9	70	21.1	47	3	VR		29.84			29.79	AA		29.78
26	1053	12	CLR	10.00		95	35.0	78	25.5	71	21.7	46	6	110		29.83			29.77	AA		29.77
26	1153	12	FEW050	10.00		97	36.1	77	25.2	69	20.6	40	5	040		29.80			29.74	AA		29.74
26	1253	12	FEW060 BKN095	10.00		99	37.2	78	25.7	70	21.1	39	0	000		29.75			29.69	AA		29.69
26	1301	12	FEW060 SCT095	10.00	VCTS	99	37.2	79	26.1	71	21.7	41	3	320		29.74		M	SP		29.68	
26	1344	12	FEW060 BKN090 BKN110	6.00	TS HZ	88	31.1	76	24.5	71	21.7	57	22	100	36	29.76		M	SP		29.70	
26	1353	12	BKN090 BKN120	10.00	VCTS	90	32.2	76	24.1	69	20.6	50	22	080	31	29.75		29.69	AA		29.69	
26	1440	12	CLR	8.00		89	31.7	75	24.0	69	20.6	52	26	100		29.72		M	SP		29.66	
26	1453	12	CLR	10.00		91	32.8	76	24.3	69	20.6	49	20	110		29.71		29.66	AA		29.65	
26	1516	12	FEW005	4.00	HZ	89	31.7	76	24.3	70	21.1	54	32	120	44	29.73		M	SP		29.67	
26	1553	12	FEW004	10.00		89	31.7	76	24.3	70	21.1	54	22	140		29.72		29.66	AA		29.66	
26	1610	12	CLR	10.00	VCTS	91	32.8	75	24.0	68	20.0	47	29	170	37	29.73		M	SP		29.67	
26	1625	12	FEW120	10.00		89	31.7	75	23.7	68	20.0	50	16	170		29.72		M	SP		29.66	
26	1653	12	FEW110	10.00		90	32.2	76	24.1	69	20.6	50	8	190		29.72		29.66	AA		29.66	
26	1753	12	CLR	10.00		89	31.7	74	23.3	67	19.4	48	10	180		29.74		29.68	AA		29.68	
26	1853	12	CLR	10.00		85	29.4	74	23.4	69	20.6	59	9	190		29.76		29.70	AA		29.70	
26	1953	12	CLR	10.00		84	28.9	73	22.9	68	20.0	59	5	240		29.77		29.71	AA		29.71	
26	2053	12	CLR	10.00		83	28.3	67	19.3	57	13.9	41	7	270		29.78		29.72	AA		29.72	
26	2153	12	CLR	10.00		82	27.8	66	18.9	56	13.3	41	9	260		29.79		29.73	AA		29.73	
26	2253	12	CLR	10.00		82	27.8	65	18.3	54	12.2	38	13	270	20	29.79		29.73	AA		29.73	
26	2353	12	CLR	10.00		81	27.2	64	17.6	52	11.1	37	15	270		29.77		29.72	AA		29.71	

Dynamically generated Thu Dec 17 19:17:41 EST 2015 via <http://www.ncdc.noaa.gov/qclcd/QCLCD>

QUALITY CONTROLLED Local Climatological Data: IMPERIAL COUNTY AIRPORT

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration

**QUALITY CONTROLLED LOCAL
 CLIMATOLOGICAL DATA**
(final)
HOURLY OBSERVATIONS TABLE
IMPERIAL COUNTY AIRPORT (03144)
IMPERIAL, CA
(09/2014)

National Climatic Data Center
 Federal Building
 151 Patton Avenue
 Asheville, North Carolina 28801

Elevation: -58 ft. below sea level
 Latitude: 32.834
 Longitude: -115.578
 Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp (F)	Wet Bulb Temp (F)	Dew Point Temp (F)	Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Altitude (in. hg)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
27	0053	12	CLR	10.00		80	26.7	61	16.2	47	8.3	31	10	260		29.75		29.69	AA		29.69	
27	0153	12	CLR	10.00		82	27.8	62	16.4	46	7.8	28	14	290		29.73		29.67	AA		29.67	
27	0253	12	CLR	6.00	HZ	79	26.1	61	16.0	47	8.3	32	13	290	23	29.74		29.68	AA		29.68	
27	0350	12	SCT009 SCT120	6.00	HZ	75	24.0	62	16.4	52	11.0	45	18	300	23	29.76		M	SP		29.70	
27	0353	12	BKN009	4.00	HZ	76	24.4	63	16.9	53	11.7	45	17	290	23	29.76		29.70	AA		29.70	
27	0405	12	BKN009	2.00	HZ	76	24.4	63	16.9	53	11.7	45	16	290	23	29.77		M	SP		29.71	
27	0412	12	OVC009	1.25	HZ	76	24.4	63	16.9	53	11.7	45	16	290	24	29.77		M	SP		29.71	
27	0432	12	OVC008	2.00	HZ	75	23.9	60	15.4	48	8.9	39	14	290	24	29.77		M	SP		29.71	
27	0453	12	SCT008	6.00	HZ	76	24.4	59	14.9	45	7.2	33	8	320		29.78		29.72	AA		29.72	
27	0553	12	CLR	8.00		77	25.0	56	13.5	37	2.8	24	18	270	28	29.78		29.72	AA		29.72	
27	0653	12	CLR	10.00		78	25.6	55	12.8	32	0.0	19	26	290	39	29.77		29.71	AA		29.71	
27	0753	12	CLR	10.00		81	27.2	55	12.8	28	-2.2	14	25	290	39	29.79		29.73	AA		29.73	
27	0853	12	CLR	9.00		84	28.9	55	13.0	24	-4.4	11	23	270	37	29.80		29.74	AA		29.74	
27	0953	12	CLR	10.00		87	30.6	57	14.0	27	-2.8	11	23	280	34	29.79		29.73	AA		29.73	
27	1053	12	CLR	10.00		88	31.1	58	14.4	28	-2.2	11	16	250	22	29.78		29.72	AA		29.72	
27	1153	12	CLR	10.00		91	32.8	59	14.9	27	-2.8	10	13	260	22	29.75		29.69	AA		29.69	
27	1253	12	CLR	10.00		92	33.3	61	15.9	33	0.6	12	14	270	22	29.71		29.65	AA		29.65	
27	1353	12	CLR	10.00		92	33.3	59	15.1	27	-2.8	10	8	280		29.69		29.63	AA		29.63	
27	1453	12	CLR	10.00		92	33.3	61	16.3	35	1.7	13	24	240	30	29.67		29.61	AA		29.61	
27	1553	12	CLR	10.00		90	32.2	61	16.0	36	2.2	15	24	240	33	29.68		29.62	AA		29.62	
27	1653	12	CLR	10.00		85	29.4	59	15.0	36	2.2	17	22	250	29	29.70		29.64	AA		29.64	
27	1753	12	CLR	10.00		80	26.7	59	15.1	42	5.6	26	18	270	30	29.73		29.67	AA		29.67	
27	1853	12	CLR	10.00		77	25.0	59	15.1	45	7.2	32	16	260		29.76		29.70	AA		29.70	
27	1953	12	CLR	10.00		75	23.9	58	14.5	44	6.7	33	20	260	30	29.77		29.71	AA		29.71	
27	2053	12	CLR	10.00		72	22.2	58	14.3	46	7.8	40	11	250		29.79		29.74	AA		29.73	
27	2153	12	CLR	10.00		70	21.1	56	13.4	44	6.7	39	11	270		29.80		29.75	AA		29.74	
27	2253	12	CLR	10.00		70	21.1	55	12.9	42	5.6	36	11	270		29.81		29.75	AA		29.75	
27	2353	12	CLR	10.00		68	20.0	54	12.0	40	4.4	36	9	290		29.81		29.75	AA		29.75	

Dynamically generated Thu Dec 17 19:15:37 EST 2015 via <http://www.ncdc.noaa.gov/qclcd/QCLCD>

FIGURE B-37
EL CENTRO NAF (KNJK) QCLCD

QUALITY CONTROLLED Local Climatological Data: NAF

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

**QUALITY CONTROLLED LOCAL
CLIMATOLOGICAL DATA**
 (may be updated)
HOURLY OBSERVATIONS TABLE
NAF (23199)
EL CENTRO, CA
(09/2014)

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801

Elevation: -42 ft. below sea level

Latitude: 32.816

Longitude: -115.683

Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Humid %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Alti-meter (in. hg)
						(F)	(C)	(F)	(C)	(F)	(C)											
26	0056	5	CLR	10.00		85	29.4	79	26.2	77	25.0	77	9	140		29.79		29.80	AA		29.75	
26	0156	5	CLR	10.00		82	27.8	78	25.4	76	24.4	82	3	060		29.79		29.79	AA		29.75	
26	0256	5	CLR	10.00		82	27.8	78	25.7	77	25.0	85	5	070		29.79		29.79	AA		29.75	
26	0356	5	CLR	10.00		81	27.2	78	25.6	77	25.0	88	6	070		29.80		29.80	AA		29.76	
26	0456	5	CLR	10.00		80	26.7	77	25.1	76	24.4	88	6	100		29.81		29.81	AA		29.77	
26	0556	5	FEW100 FEW130	10.00		81	27.2	77	25.2	76	24.4	85	8	120		29.81		29.82	AA		29.77	
26	0656	5	FEW130	10.00		84	28.9	79	26.1	77	25.0	80	9	130		29.83		29.83	AA		29.79	
26	0756	5	FEW200	10.00		88	31.1	80	26.6	77	25.0	70	7	120		29.84		29.84	AA		29.80	
26	0856	5	FEW070 FEW100	10.00		92	33.3	77	24.8	70	21.1	49	5	120		29.84		29.84	AA		29.80	
26	0956	5	FEW070	10.00		94	34.4	75	24.1	67	19.4	41	0	000		29.83		29.83	AA		29.79	
26	1056	5	FEW070	10.00		96	35.6	75	24.1	66	18.9	37	0	000		29.81		29.81	AA		29.77	
26	1156	5	FEW060 SCT070 SCT100	10.00		99	37.2	78	25.4	69	20.6	38	7	060		29.78		29.78	AA		29.74	
26	1256	5	FEW100CB CLR	10.00		98	36.7	78	25.3	69	20.6	39	5	VR		29.73		29.73	AA		29.69	
26	1356	5	FEW040 SCT060CB BKN100	10.00		92	33.3	75	24.1	68	20.0	45	24	090	29	29.72		29.72	AA		29.68	
26	1456	5	FEW050 SCT070CB SCT100	10.00		93	33.9	76	24.6	69	20.6	46	22	100	31	29.70		29.70	AA		29.66	
26	1556	5	FEW055 SCT070CB SCT110	10.00		90	32.2	75	23.8	68	20.0	48	16	150	25	29.72		29.72	AA		29.68	
26	1656	5	SCT070CB SCT110	10.00		90	32.2	73	22.9	65	18.3	44	11	160		29.70		29.70	AA		29.66	
26	1706	5	CLR	10.00	VCTS	91	32.8	74	23.3	66	18.9	44	14	170		29.71		M	SP		29.67	
26	1756	5	CLR	10.00		88	31.1	74	23.5	68	20.0	52	16	180		29.73		29.73	AA		29.69	
26	1856	5	CLR	10.00		86	30.0	73	22.5	66	18.9	51	13	200		29.75		29.75	AA		29.71	
26	1921	5	CLR	10.00		87	30.6	70	21.2	61	16.1	42	10	260		29.75		M	SP		29.71	
26	1956	5	CLR	10.00		85	29.4	68	19.7	57	13.9	39	6	230		29.75		29.76	AA		29.71	
26	2056	5	CLR	10.00		85	29.4	66	18.9	54	12.2	35	20	260		29.75		29.76	AA		29.71	
26	2156	5	CLR	10.00		85	29.4	66	18.6	53	11.7	33	15	260		29.76		29.77	AA		29.72	
26	2256	5	CLR	10.00		84	28.9	64	18.0	51	10.6	32	25	250	32	29.77		29.78	AA		29.73	
26	2356	5	CLR	10.00		83	28.3	63	17.3	49	9.4	31	22	250		29.76		29.77	AA		29.72	

Dynamically generated Thu Dec 17 19:09:58 EST 2015 via <http://www.ncdc.noaa.gov/qclcd/QCLCD>

QUALITY CONTROLLED Local Climatological Data: NAF

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

**QUALITY CONTROLLED LOCAL
CLIMATOLOGICAL DATA**
 (may be updated)
HOURLY OBSERVATIONS TABLE
NAF (23199)
EL CENTRO, CA
(09/2014)

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801

Elevation: -42 ft. below sea level

Latitude: 32.816

Longitude: -115.683

Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp (F) (C)	Wet Bulb Temp (F) (C)	Dew Point Temp (F) (C)	Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Alti-meter (in. hg)			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
27	0056	5	CLR	10.00	HZ HZ	82	27.8	60	15.7	43	6.1	25	17	250		29.73		29.73	AA		29.69	
27	0156	5	CLR	10.00		83	28.3	60	15.7	42	5.6	24	20	270		29.72		29.72	AA		29.68	
27	0256	5	CLR	10.00		80	26.7	61	16.2	47	8.3	31	22	270	28	29.73		29.73	AA		29.69	
27	0343	5	FEW007	3.00		77	25.0	62	16.8	52	11.1	42	21	280	36	29.73		M	SP		29.69	
27	0356	5	CLR	6.00		76	24.4	62	16.6	52	11.1	43	28	270	34	29.73		29.74	AA		29.69	
27	0456	5	FEW070 FEW120	9.00		77	25.0	58	14.3	41	5.0	28	28	270	38	29.75		29.75	AA		29.71	
27	0556	5	FEW070 FEW120	10.00		79	26.1	55	12.8	31	-0.6	17	30	260	43	29.76		29.77	AA		29.72	
27	0656	5	FEW070 FEW120	10.00		79	26.1	54	12.2	27	-2.8	15	29	270		29.77		29.77	AA		29.73	
27	0756	5	FEW070 FEW180	10.00		83	28.3	55	12.6	23	-5.0	11	31	280	38	29.78		29.78	AA		29.74	
27	0856	5	FEW070 FEW180	10.00		86	30.0	55	12.9	19	-7.2	8	25	260		29.81		29.82	AA		29.77	
27	0956	5	FEW070 FEW180	10.00		88	31.1	57	13.9	24	-4.4	10	23	240		29.80		29.81	AA		29.76	
27	1056	5	FEW070 FEW110	10.00		89	31.7	57	14.1	24	-4.4	9	18	250		29.77		29.78	AA		29.73	
27	1156	5	FEW070 FEW110	10.00		91	32.8	59	14.8	26	-3.3	9	14	210		29.73		29.73	AA		29.69	
27	1256	5	FEW070	10.00		92	33.3	58	14.5	22	-5.6	8	10	290	37	29.70		29.70	AA		29.66	
27	1356	5	FEW000 FEW070	10.00		94	34.4	59	14.9	22	-5.6	7	9	290		29.67		29.67	AA		29.63	
27	1431	5	CLR	10.00		94	34.4	62	16.5	34	1.1	12	24	230		29.67		M	SP		29.63	
27	1456	5	CLR	10.00		93	33.9	62	16.5	35	1.7	13	25	230	32	29.67		29.67	AA		29.63	
27	1556	5	CLR	10.00		90	32.2	60	15.7	34	1.1	14	28	240	33	29.68		29.68	AA		29.64	
27	1656	5	CLR	10.00	86	30.0	59	15.0	35	1.7	16	29	250	32	29.69		29.70	AA		29.65		
27	1756	5	CLR	10.00	81	27.2	59	15.1	41	5.0	24	28	240		29.72		29.73	AA		29.68		
27	1856	5	CLR	10.00	78	25.6	59	14.9	43	6.1	29	25	240	32	29.74		29.75	AA		29.70		
27	1956	5	CLR	10.00	76	24.4	58	14.2	42	5.6	30	28	250	36	29.76		29.76	AA		29.72		
27	2056	5	CLR	10.00	74	23.3	58	14.3	44	6.7	34	18	260		29.78		29.79	AA		29.74		
27	2156	5	CLR	10.00	74	23.3	56	13.2	39	3.9	28	16	260		29.80		29.80	AA		29.76		
27	2256	5	CLR	10.00	72	22.2	55	12.7	39	3.9	30	14	280		29.80		29.80	AA		29.76		
27	2356	5	CLR	10.00	70	21.1	54	12.0	38	3.3	31	14	260		29.79		29.80	AA		29.75		

Dynamically generated Thu Dec 17 18:50:45 EST 2015 via <http://www.ncdc.noaa.gov/qclcd/QCLCD>

FIGURE B-38 **YUMA AZ MCAS (KNYL) QCLCD**

2/8/2017

QUALITY CONTROLLED Local Climatological Data: YUMA MCAS

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA (may be updated) **HOURLY OBSERVATIONS TABLE** **YUMA MCAS (03145)** **YUMA, AZ** **(09/2014)**

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801Elevation: 213 ft. above sea level
Latitude: 32.65
Longitude: -114.616
Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Altitude (in. hg)
						(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
26	0057	5	CLR	10.00		85	29.4	78	25.4	75	23.9	72	15	150		29.55			29.77	AA		29.78
26	0157	5	CLR	10.00		84	28.9	78	25.3	75	23.9	74	15	150		29.55			29.77	AA		29.78
26	0257	5	CLR	10.00		84	28.9	78	25.3	75	23.9	74	13	150		29.55			29.76	AA		29.78
26	0357	5	CLR	10.00		84	28.9	76	24.6	73	22.8	70	15	160		29.54			29.76	AA		29.77
26	0457	5	CLR	10.00		85	29.4	77	24.7	73	22.8	67	14	140		29.55			29.76	AA		29.78
26	0557	5	CLR	10.00		85	29.4	77	24.7	73	22.8	67	10	140		29.56			29.77	AA		29.79
26	0657	5	FEW100	10.00		84	28.9	76	24.6	73	22.8	70	7	140		29.58			29.80	AA		29.81
26	0757	5	FEW100	10.00		87	30.6	78	25.4	74	23.3	65	14	150		29.59			29.81	AA		29.82
26	0857	5	SCT024	10.00		89	31.7	78	25.7	74	23.3	61	18	150		29.60			29.82	AA		29.83
26	0957	5	SCT025	10.00		92	33.3	79	26.1	74	23.3	56	17	160		29.60			29.82	AA		29.83
26	1057	5	SCT025	10.00		95	35.0	79	26.2	73	22.8	49	16	180		29.59			29.80	AA		29.82
26	1157	5	SCT030	10.00		97	36.1	78	25.8	71	21.7	43	13	190		29.57			29.79	AA		29.80
26	1257	5	SCT050 SCT200	10.00		99	37.2	77	25.1	68	20.0	37	14	190		29.54			29.75	AA		29.77
26	1357	5	FEW050 SCT200	10.00		101	38.3	77	25.1	67	19.4	33	17	170	22	29.50			29.71	AA		29.73
26	1457	5	FEW050 BKN200	10.00		102	38.9	76	24.0	65	18.3	30	15	170		29.48			29.70	AA		29.71
26	1555	5	CLR	10.00	TS	99	37.0	75	23.9	64	18.0	32	18	180		29.44			M	SP		29.67
26	1657	5	FEW030 BKN200	10.00		99	37.2	75	23.9	64	17.8	32	17	170		29.44			29.66	AA		29.67
26	1657	5	FEW030 SCT100 BKN200	10.00		97	36.1	76	24.2	66	18.9	36	8	230		29.47			29.68	AA		29.70
26	1757	5	FEW030 SCT100 BKN200	10.00		90	32.2	74	23.5	67	19.4	47	3	300		29.46			29.68	AA		29.69
26	1857	5	FEW030 SCT100 BKN200	10.00		90	32.2	74	23.5	67	19.4	47	8	250		29.48			29.70	AA		29.71
26	1957	5	FEW050 SCT100 BKN200	10.00		90	32.2	74	23.5	67	19.4	47	13	220		29.51			29.73	AA		29.74
26	2057	5	FEW050 SCT100 BKN200	10.00		88	31.1	75	23.8	69	20.6	53	10	190		29.51			29.72	AA		29.74
26	2157	5	SCT050 SCT100 BKN200	8.00	HZ	88	31.1	76	24.5	71	21.7	57	26	190	34	29.53			29.74	AA		29.76
26	2201	5	SCT050 SCT100 BKN200	3.00	BLDU	87	30.6	76	24.3	71	21.7	59	29	190	34	29.52			M	SP		29.75
26	2206	5	SCT050 SCT100 BKN200	5.00	HZ	86	30.9	75	23.8	70	21.1	59	28	190	34	29.52			M	SP		29.75
26	2257	5	FEW050 SCT100 SCT200	10.00		84	28.9	74	23.5	70	21.1	63	16	170		29.50			29.72	AA		29.73
26	2357	5	FEW050 SCT100	10.00		84	28.9	73	22.8	68	20.0	59	11	170		29.50			29.72	AA		29.73

Dynamically generated Wed Feb 08 11:39:32 EST 2017 via <http://www.ncdc.noaa.gov/qclcd/QCLCD>

QUALITY CONTROLLED Local Climatological Data: YUMA MCAS

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

QUALITY CONTROLLED LOCAL CLIMATOLOGICAL DATA (may be updated) **HOURLY OBSERVATIONS TABLE** **YUMA MCAS (03145)** **YUMA, AZ** **(09/2014)**

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801Elevation: 213 ft. above sea level
Latitude: 32.65
Longitude: -114.616
Data Version: VER2

Date	Time (LST)	Station Type	Sky Conditions	Visibility (SM)	Weather Type	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Humd %	Wind Speed (MPH)	Wind Dir	Wind Gusts (MPH)	Station Pressure (in. hg)	Press Tend	Net 3-hr Chg (mb)	Sea Level Pressure (in. hg)	Report Type	Precip. Total (in)	Altitude (in. hg)	
1	2	3	4	5	6	(F)	(C)	(F)	(C)	(F)	(C)		13	14	15	16	17	18	19	20	21	22	23
27	0057	5	SCT050 SCT100	10.00		84	28.9	74	23.2	69	20.6	61	9	200		29.50			29.71	AA		29.73	
27	0157	5	SCT050 SCT100	10.00		84	28.9	74	23.2	69	20.6	61	5	190		29.49			29.70	AA		29.72	
27	0257	5	SCT050 SCT100	10.00		84	28.9	73	22.5	67	19.4	57	0	000		29.48			29.69	AA		29.71	
27	0306	5	SCT050 SCT100	10.00		84	28.9	72	22.2	66	18.9	55	3	130		29.48		M	SP		29.71		
27	0328	5	FEW050 SCT100	10.00		84	28.9	72	22.2	66	18.9	55	5	140		29.47		M	SP		29.70		
27	0357	5	FEW050 SCT100	10.00		84	28.9	73	22.5	67	19.4	57	5	130		29.47		29.68	AA		29.70		
27	0457	5	SCT050 BKN080	10.00		83	28.3	74	23.0	69	20.6	63	6	290		29.48		29.70	AA		29.71		
27	0557	5	SCT050 BKN080	10.00		84	28.9	69	20.3	60	15.6	44	13	320		29.49		29.71	AA		29.72		
27	0636	5	SCT030 BKN080	3.00	BLDU	81	27.2	62	16.4	47	8.3	30	16	310	26	29.50		M	SP		29.73		
27	0644	5	SCT030 BKN080	5.00	HZ	80	26.7	61	16.2	47	8.3	31	14	310	23	29.50		M	SP		29.73		
27	0657	5	SCT030 BKN080	5.00	HZ	80	26.7	61	16.0	46	7.8	30	15	310	22	29.51		29.72	AA		29.74		
27	0757	5	SCT050 BKN100	6.00	HZ	81	27.2	60	15.3	42	5.6	25	13	310	26	29.52		29.74	AA		29.75		
27	0857	5	SCT040 BKN100	10.00	HZ	84	28.9	58	14.2	33	0.6	16	15	330		29.53		29.75	AA		29.76		
27	0957	5	FEW050 SCT100	10.00		88	31.1	58	14.3	28	-2.2	11	15	320		29.53		29.75	AA		29.76		
27	1057	5	FEW050 BKN120	10.00		87	30.6	57	13.7	25	-3.9	10	15	310		29.52		29.74	AA		29.75		
27	1157	5	FEW060 BKN120	10.00		89	31.7	M	M	M	M	14	14	310		29.50		29.72	AA		29.73		
27	1257	5	FEW060 SCT120	10.00		93	33.9	62	16.6	36	2.2	13	14	280		29.46		29.68	AA		29.69		
27	1357	5	FEW060 FEW120	10.00		93	33.9	63	17.1	39	3.9	15	14	290		29.44		29.66	AA		29.67		
27	1457	5	FEW120	10.00		94	34.4	63	16.9	37	2.8	14	14	300		29.42		29.64	AA		29.65		
27	1557	5	FEW120	10.00		93	33.9	59	14.8	23	-5.0	8	15	290		29.41		29.62	AA		29.64		
27	1657	5	CLR080 CLR120	10.00		93	33.9	59	14.9	24	-4.4	8	15	280		29.40		29.64	AA		29.63		
27	1757	5	FEW050	10.00		91	32.8	59	14.8	27	-2.8	10	11	300		29.41		29.62	AA		29.64		
27	1857	5	FEW050	10.00		87	30.6	59	14.9	33	0.6	14	13	310		29.42		29.65	AA		29.65		
27	1957	5	CLR	10.00		84	28.9	58	14.4	34	1.1	17	14	300		29.45		29.67	AA		29.68		
27	2057	5	CLR	10.00		80	26.7	57	14.1	37	2.8	21	9	310		29.48		29.70	AA		29.71		
27	2157	5	CLR	10.00		78	25.6	57	14.0	39	3.9	25	9	320		29.50		29.72	AA		29.73		
27	2257	5	CLR	10.00		76	24.4	57	14.0	41	5.0	29	6	350		29.52		29.74	AA		29.75		
27	2357	5	CLR	10.00		75	23.9	57	13.6	40	4.4	28	9	320		29.52		29.74	AA		29.75		

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